SEQUENCE LISTING

<110> Salceda, Susana Macina, Roberto Recipon, Herve Cafferkey, Robert Ali, Shujath Sun, Yongming Liu, Chenghua <120> Compositions and Methods Relating to Prostate Specific Genes and Proteins <130> DEX-0285 <150> 60/252,186 <151> 2000-11-21 <160> 211 <170> PatentIn version 3.1 <210> 1 <211> 721 <212> DNA <213> Homo sapien <400> 1 actaattgaa aaatatgaag gtagtgacac aaacaatgga accaaataaa tcaaatagaa 60 cagacaaaga aaaggcacaa gaaaccggac cacagctagt ggagaagctt gaccataaaa 120 ctagaaccat cagttttagg aaaagatagc tcagttggat ccagttacag aatttttgtt 180 taaqctcatt atcgaaaaca agaaggtaaa gttttaaagt gggatgattc aaaaggggga 240 agtttccaag agtgtgaaag taaaacttta aaacttctta aataaattat gggagatctc 300 tqtqatctca gggcttgaac aggattttgc tttaaggaac aagaaaaaac ttcaagacca 360 ttaaaqcqaa caatatcagc tacactgctg tttatcaaag atacattata acaaagagtg 420 caaaacaggc aagtgacaat ctaaaagcaa gtcatttgta atgatcatta tataaccgtg 480 tgaaagaaaa aaaaaacaaa gggtcaacta aatacatgaa agtgctcaaa gccacgtgga 540 tatcagggaa attcaaagta aaaccagaat catatttcct gtcacaatat accagacagg 600 ccaaaactag ccagaggttg aagatgtggc aataacaggg tgactccctt cactgcttac 660 tqaacaqttg gtaagccgaa tttcaagcaa actggacggc cgattactca gtggaatccg 720 721

<210> 2 <211> 1142 <212> DNA

а

<213> Homo sapien

a.	400> cattc	2 tgaa	actagatttg	attggtgacc	taacaatttc	actcctaggt	atataacccc	60
t	caaac	ctac	ccaaatgtca	taaacagaca	cacacacaca	cacacacaca	cacacacaca	120
c	acact	cttt	catgtgtaaa	acatagaact	taaactcgtg	tccatcattt	cgtcctcata	180
a	aggga	tggt	ttcatagggc	ttatctatct	tctttcctag	tgtcttcttg	tgtgttctct	240
t	ttgtc	gagt	gttttcagag	atgaaatata	ttaccagtta	gaagggggaa	caagagtttt	300
С	ttgtt	atgg	atgttttata	tgtttctact	tctttaccac	acgaggtgtt	cgccatacta	360
t	caaaa	gatg	gtagtaggtg	ctagtatgct	ataaagtaaa	gctagtgaca	tcgttgatgg	420
a	aaacc	cccg	atcgttggtc	tatcccccaa	gggagggagg	ttttaaaacg	gcccggcctt	480
t	ttcga	attg	tttggacaaa	aaacctctat	acaaaatgat	tagaaccaac	ttctttataa	540
t	actcc	cttt	ctactcttat	ttctaaaaca	ataaaatatt	acacgtaagg	gttctatatg	600
9	ctccc	tgta	tacaagacat	tattcctaag	cagactctgc	ttataaagac	ctctaagata	660
а	tctct	cctg	tatatgtgcc	ctttaaagtg	cgacaagtgt	gttttaacag	acaagctgga	720
t	gttta	ttat	acttttacag	agggaagaca	atcattattt	ttaatgaatg	gaatggaaaa	780
t	aaacg	ggga	aaaaactca	tccccaaatg	gatgcaaaat	atgctatata	aaagacctct	840
9	gactat	agaa	taaggagcat	catagttttg	cttttgtaat	taatgtgctt	gtttttaaca	900
t	aatg	gattg	agactattag	tctgatttta	gagcacttct	tacctagttg	cttttaagtg	960
t	ttagt	gtct	tcatggttag	ttctccatat	gacaggaaaa	. aaattagaaa	aataaaagat	1020
9	gtatti	taatt	ctactttcat	ctccaacatt	tatttgttta	taggagaaag	attttctgct	1080
1	ttttai	ttaag	ttctttatca	aatatgttta	cttttccaca	catgtctctg	aagtttcact	1140
9	gt							1142

<210> 3 <211> 954 <212> DNA

<213> Homo sapien

<400> 3 getttattga ttcatgggtc gtagctgggg tcgcacagct gttaatagta ggatcttgct 60 gtatattcaa gcttacattc ctgctgcttt tcacattatg catattacac tttttataat 120 tgtcatagag tttacagttc ttggaatttt tgtttcatat tttttaattt tctcgctctc 180 tattttttt tttttttt tatgtgggtc tctttggctt tttgtgtttg tgggggagaa 240 gttttttatg tgcaccttat ttccacaagt ttcttcgtaa tattcttatt ctctgggctc 300

			3			
attgctccac cac	ttacgtg a	tgtgacccc	aatttaaatg	tgcacctctt	tatattttat	360
tattctccgg gtg	ctctttt a	attttgtga	accactttac	ctgttgtata	ggttetettt	420
atttgtggga att	ctccaca t	tettetect	gtattatacc	attctatact	atatctctgt	480
gtetgtettg tgg	catttat g	gtgtgctcta	taaattcttt	gtgccatgtg	tgagaacccc	540
tttttactat atc	tctatag t	atattacta	ggctatattt	tctcacaatc	ttctcccact	600
attattttt atc	acaatgt o	etgtgcacca	aaacatctct	gtgtgtgtct	ccaccatttt	660
attgacagct cct	ccctccg g	getteteegt	gaactcacct	tetgtggete	tetetgttat	720
aaacacaaca tgt	tgtttgc a	acgtcgcggc	tctctacacg	tegggeteet	ctcctcttct	780
cgaaaccttc tgo	etegteat a	atcttcttct	atcttgttag	cgtgttacac	ccccttttg	840
tgtttacaaa tct	ttttctt o	ctattgttgg	gaaaccaccc	caggcactgt	gttcgaacat	900
tttttctctt tcg	gtggaccc a	aaatttatga	gaacaccact	gtggacgggc	aact	954
<210> 4 <211> 402 <212> DNA <213> Homo Sa	apien					
<400> 4 acggtctgta aaa	agacctg	aaaaacgtat	tctttaaatg	gtgcacaagg	aataggagag	60
gaattagatg gt	aaaaaac	tgtaatgcaa	gaggcaataa	agccattgtg	taacagggga	120
tacttttagg ac	aaaacaga	agacaagcta	teccaaaata	aaatttacat	ttcacaacct	180
agatttcata cc	attacaca	cacacacaca	cacacacaca	cacacacaca	cacacacata	240
tacacacaca ct	ttatctat	aatacagaac	agccaactca	ggcagaacac	aagcgctcag	300
agtctctgta aa	ctcatttc	ctcagtatct	ccagatgtgc	cacaggtgag	ggagtgttca	360
gaaataggaa tg	gtggatta	cgtgattggc	gcgagggatt	gt		402
<223> a, c,						
<400> 5 agaaacacgg gg	aagccggc	ggcgggagga	atcagtaacg	agececated	attaatacgg	60
cgcgggtgct gg	aatcggat	tacgtggtcc	ggcgacgtac	cctagctggg	g gagtagagca	120

tgggcagatt tcagcacttg gcccccaacc cccatctcag ccaagcgccc tcaacctgtg 180 240 caccaactgc atacataact gattetttac teccaetegg ggaagettea tgtcaeetet 300 ctgagcacca gtgtcctcat ctgtaaaata gcacaatgtc ctcttcctac ctcacttatt ttetetggae teattggaee taaggeagan nnnnnnnnn nnnnnnnnn nnnnnnnnn 360 420 480 540 natgtggcta caagacaagc aatgccaaga attgccactg ttatggtttg aatatttgtc 600 ccctgtaaaa atgcatgttg agatttgatt gctattctaa cactgttaag agctggggac 660 ctttaagtga tgattcggcc gtgaaggctg tgcctcaatg tactgggttt cataccttta 720 ttaaqqqqct gtgggagtga gtcctgtctt cgggcttctg ccctctgact gttaaacctt 780 822 teteceetee tgggggeett catgetteeg tgggaaacag ce <210> 6 <211> 552 <212> DNA <213> Homo sapien <400> 6 60 ctgggtgaat tatacaaaac attaaaaaga aaaaataaac cccaatcatt tgtgcaaact 120 totttottta attacattga agaacacaca aaacacttto attotcattt cattootgtt 180 ttgaagaaca acgcatttat cttgtgatac caagagccag aaaaagaaca atcccagttg 240 ataagtgcga tgtggtttga aactaactat tgtggttacg gagcggcaca tacttacctc 300 caaaattctc tcagaacata aatttgtgac ttcctttatg tgaaattccc caaaaggtgc 360 ttttggcatt aaatttaaaa acaatctcaa ctactaacaa ttttgtattc aaaatttctc 420 aaacagactt totgaattac gactoacaac aattotttgt aaacggacaa aacaaaagtt 480 tgcaaagaat ttcacgactt ccctgatttt taacgaattg actcttaatt gctacaataa 540

552

ttcaaaacag tg

<210> 7 <211> 725

<212> DNA

<213> Homo sapien

<400> 7

tetgtggeet caageaacte te	ettatacet te	cagcettee (caaagttggt	tgggattaca	180
ggtgtgaacc accaagtgcc cg					240
					300
aaacctgagg gaaaacgtgt at	tcatatggt a	atatgagag	tctatgatat	catagtgtga	300
tattacatgg aatcctatgt tt	tettatttg t	caagatatt	ggcccgatga	attctccttt	360
ctttatcaat agttcttgac ag	gegtttttg e	ttcaagaat	ttattcaatc	tctatgaaaa	420
ttgaaattat ttccatcatt at	ttcctaaag a	agttttact	ttagccatta	tacctatttt	480
cttcacctga tgaaacctga to	ctctgaagt t	teeteggta	cacacgtttt	gggatttagc	540
aggatttcag tgattttact ca	atccatagg a	catatacgt	gatttactgg	tcacactaaa	600
gtaacacgat ataacaggat ta	agggcacta a	tatcctttt	tgcacaccac	ttcaagatgt	660
ttgtgcaaag ccccttatca gg	gtgcaacgg t	ccaaaggtg	cccattatcc	actggagaat	720
aggct					725
<210> 8 <211> 617 <212> DNA <213> Homo sapien <220> <221> misc feature <222> (174)(445) <223> a, c, g or t					
<400> 8 acatgtatat aacgaagaca t	gtataagat g	gctcatagaa	gccctgttta	tactaatagc	60
aaagaataaa aattgacctt a	atgcctgag a	aacagaatag	atacataaat	tgtgttatag	120
tcacacaatg gaatactaaa a	actagattg t	gggaaaagc	aagtttcaga	gaannnnnnn	180
nnnnnnnn nnnnnnnnn n	nnnnnnnn r	nnnnnnnn	nnnnnnnnn	nnnnnnnnn	240
nnnnnnnnn nnnnnnnnn n	nnnnnnnn r	nnnnnnnnn	nnnnnnnnn	nnnnnnnnn	300
nnnnnnnnn nnnnnnnnn n	nnnnnnnn r	nnnnnnnnn	nnnnnnnnn	nnnnnnnnn	360

nnnnnnnnn nnnnnnnnn nnnnnaaaca aaaaaattcc agggtagctc aattagtaag

ccgatttcca gcaacattgg cgggccggta cactagttgg attccgacct cgggatacca

aggetttggg tataacteat ggeatagetg teeetgtgtg aatttgttat tgeteacatt

120

420

480

540

600

ttagcgtggt cgcggcgagg tactgggacc acagatgcag gatactgcac ctggatgatt

ccacattttg	agcaaaa	61

<210> 771 <211> <212> DNA <213> Homo sapien

<400> 9

acaaatccca ttcctaaggg ctccaacctc atgaattaat taaacttaaa aagcccaaca 60 acaaaatacc atcatatgga aatgacaaat tcaacataca aattttgggg ggacacaaaat 120 atccaattqc ttqtatttga caggtaacca agtcaaagtt agttcagaat tatataaaaa 180 gggccagtca gaaaagtgat gtttcttccc attacttgtg atcatttgca ccccatttct 240 coccattttc tctagataac caagcttgtt aggctatact tttatcctat gtgattttat 300 360 ttttgcaata attatgcaaa taccagtata ttttactctc ccctcctatt tttcccaaaa 420 taccatggta aatgtcatta atttaaatat taaaagtaga gagtgacatg tttaagaatg cctatgtcat atagacagat caggaaatat tttatgtcaa agcactattt atactgagac 480 ccaggaagaa gacagaaagt totatgaggt agcagtttct atagctcttg aatgttgatg 540 tttgttctct tataatttgg atatttaatt tctttatatg tctttaaatt atttttgact 600 ttcatgatat agtcccctta aatcacagat tcataattat atcttcgcgt atgatttatt 660 aattacacca aggaataaaa cccataaaac tataatttca taaaagttaa tttttgaaaa 720 cttgtgtgga ttattatgat tggatcagta tttcttcatg tgattcacag t 771

<210> 10 <211> 1163 <212> DNA <213> Homo sapien

<400> 10

geccetttea agaagettge getttetgat atttteteea teactettge eteetgtggt 60 agaggagett tgggetactc cttaacaaat cattcatgga tcggcagcaa atctgcaaca 120 tatggaaata tttgccaatt tttgtcctca gctttgggtc tcagccaaaa tggagattta 180 240 tgttttttag agacagggtc ttactctgtt gccagactgg aatgcggtgg tgtgcccata 300 geteactgea geeteaaact eetggaetea agaattetee tgeeteggee ttetgagtag 360 ctaggacttt atatagetta ttettataag ggtacaaate ccatteetaa gggeteeace 420 ctcatgactt aattacactc aaaagcccca ccaccaaata ccatcatatt gaaatgacaa 480 attcaacata caaattttgg ggggacacaa atatccaatt gcttgtattt gacaggtaac 540

caagtcaaag ttagttcaga attatataaa	aagggccagg	cagaaaagtg	atgtttcttc	600
ccattacttg tgatcatttg caccccattt	ctcgccattt	tctctagata	accaagcttg	660
ttaggctata cttttatcct atgtgatttt	atttttgcaa	taattatgca	aataccagta	720
tattttactc tcccctccta tttttcccaa	aataccatgg	taaatgtcat	taatttaaat	780
attaaaagta gagagtgaca tgtttaagaa	tgcctatgtc	atatagacag	atcaggaaat	840
attttatgtc aaagcactat ttatactgag	acccaggaag	aagacagaaa	gttctatgag	900
gtagcagttt ctatagctct tgaatgttga	tgtttgttct	cttataattt	ggatatttaa	960
tttctttata tgtctttaaa ttattttga	ctttcatgat	atagtcccct	taaatcacag	1020
attcataatt atatcttcgc gtatgattta	ttaattacac	caaggaataa	aacccataaa	1080
actataattt cataaaagtt aatttttgaa	aacttgtgtg	gattattatg	attggatcag	1140
tatttettea tgtgatteae agt				1163
<210> 11 <2211> 184 <212> DNA <213> Homo sapien <400> 11				
ccgtctgtgg gtttacacaa ggtcacaaag	atttacactc	agtgtcttca	aagcagtccc	60
actggttttc acgcaaatat aggggtttga	tctttcttga	gttaactttt	tttatcacca	120
taatcttttt aactttttat cttgaaatag	g ttttagattt	acagataagc	tcgcaaaata	180
tagt				184
<210> 12 <211> 856 <212> DNA <213> Homo sapien				
<400> 12 cggccgccag gttatatgtg tactctgcat	aatatoggot	tgggcaggtg	gattttgtat	60
caaaatatac cagcttcata ttctcaggaa				120
ctttaaatat ttggtagttc ttaccagtaa				180
gtttttaatg gaaaagattt aaattggcto				240
catttttcta tttcttcttg tgttcattt				300
ttcatttttt tctaaatttt tatatttat				360
	_	_		

tttcttttaa tgactgcagg atctacactg atgcctcctt tttctttcat gataccattt

			0			
gtttgtgctg	cttcgtgttc	tetettettt	cgttactcag	tctcaccaga	agtttgtcta	480
aggtcttcaa	agacacaact	tttagctttc	ttgatgttct	ctgtttcctg	tttcatgaag	540
gcttgcttta	ctatttcttc	ggtctttaat	tgcgctattc	tgtttctgat	tatttgagaa	600
tcatgcttgg	ggtgatgaat	ttctcattct	ttcttcttta	aaattcattt	tatgggttat	660
actttcctct	aaatactgct	tcacttgcat	tccacaagtt	ttaatgtctt	tgttttccta	720
ttatcattca	gtataaaatt	tattctaaat	tttatgattt	cttttttgac	aactgatttt	780
tataactttg	tcaaatatgt	aggagtttct	attacatttt	tcttatgaat	gtctagcttg	840
attttatagc	agtcag					856
<210> 13 <211> 521 <212> DNA <213> Home <400> 13	o sapien					
	cgatcagaag	cataataagg	taacaaatgt	aaaaagagag	aggtaacttt	60
tcacacagtt	gcttggagat	tggaggaaaa	caaccaatat	aaatatgtga	aagatgtaga	120
atgtaagaaa	tagtgggttt	gaaacaggag	ttcaaggaca	agaaattcag	gtgaaaacat	180
aacagcagga	ctagaaagta	ttttatccta	caagtctctt	aaactattat	attttacaca	240
cttttaacct	ctctatgctg	catttgagtt	gtttaaatca	atttctttcc	agtttgcaaa	300
gaatctgtct	tcaatttgtg	taataaggta	agctaacgca	aatagtcttc	tgtttaactt	360
cccaaatggt	taatgttttg	tttcatagaa	atttccaatt	tggttctttt	cccagtcttc	420
caatccttta	aaaaatttag	taaagaaaaa	ataatttgtt	ttttgtttta	attcctcaaa	480
tttttggatg	ctgatttctt	tttttttt	tttttcccaa	a		521
	o sapien					
<400> 14 gtctctgtct	ctcttctccg	cctcgccctt	gctcctctct	cgtgcgcctc	tcccgtacgc	60
ttctctcctc	tctcctccgt	cctcctgccc	ttccccgcct	ctgccccgt	tegteceget	120
ttcagagcgc	cggtaattgt	ggcctcggcc	tataggagcc	gttactttac	taagttgtgt	180
gggcttataa	ccgtccctca	gggtggtttc	ttgtcgcccc	taggttccct	actgtacgtt	240
tggtgatata	cacgtagctg	gttctagctg	taattgttat	attactgtac	ttctactatt	300

agggcgtata ttgggctcct gcttagtatg ctatgctgcg tagcgtcctg tccagttgtg

						420
	tttgctagta					
atattatggt	taatttatat	agtttattgt	tgtgaatata	aatgtgttgt	aggggttggt	480
tttttatatc	tatttataat	actatatagt	agtatatgct	tgcttgcaac	aattttataa	540
ttgtttgaaa	caataattat	gcttaccatt	attctccccc	attccttatt	ccatcaatta	600
tagctactgc	taacaatttg	atatgtatcc	tctcctttta	tttctttggt	cctggcactc	660
atacataatt	acttatcact	acataattat	aagtggattt	attttgtatc	ctcggccgac	720
ctcggccata	accgaactgc	agaca				745
<210> 15 <211> 814 <212> DNA <213> Homo	o sapien					
<400> 15 gcagtgtgct	gacatgcggc	ttacaagtat	cacaaaagca	ggggttgggg	gttgagaaca	60
tggataaagt	caaattagtt	taagtcatta	attctgtttt	tgttatttgg	taaagggctg	120
gtctcagaat	tactgctaaa	tgtcatctat	ctgtgttata	tctgatatta	ttattaagat	180
tcaagttggc	cctctatttc	agttttacct	gggttattaa	gcatatttat	agacaaaata	240
aaatgtttat	attaacactg	tgttattaga	aaacatcatc	aagaaacaga	ctgataagac	300
attaatttt	gcccacaagt	gtgtaacgat	aagaagacaa	gataaagagc	agtctgattt	360
taaaagaacc	taaatagtag	tttcagctgt	aaagtttaag	taataattta	aactgtagtt	420
gggtgccata	aattaattat	ataacccaac	aaatacaaca	gaatgccaca	aagtaaccat	480
aatgcagtaa	gatgaaagta	tcctacaaca	acaaaaaac	gagaaaatcc	ccaagttgtt	540
ttttctttcc	aaaaagcatt	tctttatatc	accacaatta	cgcgagttac	tttggactaa	600
taggcaaaat	atagacatta	tcaacacttg	accaagaatt	acacttatgc	agttaataac	66
ttaagtttta	ataagaaaac	caagagagga	ttccacagac	cctaccatgt	gactcttaat	720
attctctaag	tttttagaag	cgattcacaa	atggggcgta	catatgtcca	ctggccagtg	78
ggaacggctc	gtccgtgagt	ccgcaccaaa	aagg			81

<210> 16

<211> 575 <212> DNA

<213> Homo sapien

<400> 16

agatcagtgg tcgagctcac ttcgctgata cggccgcgag tgtgctggca ttcgggttac

agtggcagac actagtttcc caatatttaa ttttctcttg aaagctcaaa tttgatcatt 120 ggcaacacat actatcagtt gtttgtagcg aagggacagg tttactaaat ttatttttag 180 caataatata tqccaaatac ccaaqtctca qtaaccatqq tttaactqtc aqcqttcttt 240 caagtaaaaa ttatgttcca tgaacaaagc agctaattca gaagcttaca actcaattgc 300 ataaccactt tootttqtta ttoaactqat ttqcttaatt atatacttct cattttqtca 360 catggtcata ttacaaacac attgtacttc aagggcttga tgatttaata aaattaataa 420 ttctcattac ttcatcaaag atgttattta gtgaaaactg gctggctttc tttttctttc 480 ttttttttta caaactgtta acgcttgttt gtcgctgaca aaatttatgg acacgttttg 540 ggcgcctctg ccattgattc atgataaggt aagcc 575 <210> 17 <211> 861 <212> DNA <213> Homo sapien

<400> 17 actatgccat gttccgaatc tagctcggta accaatccat tgcggtgaac catctqccaa 60 attatotqqt accacaattt cccctqccqa atacattqca actaacccqq ccttttttt 120 tttttttttg agatggagtc ttgctctgtt gccaggctgg agtgcaatgg catgatctcc 180 geteactgea acctecacet ecegggttea agtgattete etgeeteage etectgagta 240 gctgggacta caqcqtqtq ccaccacqca caqctaattt ttqtaatttt aqtaqaqatq 300 gggtttcatt aataatcatt aatattagac aactgtcaga ctcacagtgg tggatacaaa 360 ctttctcaaa ttctgatttt tactctaaag ctcaaatttt atcattggca acaaatattg 420 toaqttqttt qtaqcqaaqq qacaqqttta ctaaatttat ttttaqcaat aatatatqcc 480 aaatacccaa gtctcagtaa ccatggttta actgtcagcg ttctttcaag taaaaattat 540 gttccatgaa caaagcagct aattcaqaaq cttacaactc aattqcataa ccactttcct 600 ttgttattca actgatttgc ttaattatat acttctcatt ttgtcacatg gtcatattac 660 720 aaacacattg tacttcaagg gcttgatgat ttaataaaat taataattct cattacttca tcaaagatgt tatttagtga aaactggctg gctttctttt tctttctttt tttttacaaa 780 ctqttaacqc ttqtttqtcq ctqacaaaat ttatqqacac qttttqqqcq cctctqccat 840 tgattcatga taaggtaagc c 861

<210> 18

<211> 994

<212> DNA

<213> Homo sapien

<400> 18 60 ggaaaggaaa qgaaaaqaaa qaggaqcaac qtaqcaaaat cttqqtattt qccqaaattc 120 gatgatgaga atatagagaa tgtgttatac tcttctttct gcctcagatt attcataaca 180 gtgtcatttg ggcattgtqc agacagtqca tatattgtgg ctataaaata ctatgctgag 240 aataaatata tttqcaaaac aatcattatt cttaaqatat cttcatqqat cctcccaatq 300 ttetttattt etteteaaat teatgactge aaatageaaa getgeettet ateetteaee 360 acatcaaagc aataggattt ggaattattg ttaatacagt ttacccaagt tctagggaga 420 aaatttgcaa acteccaetg tgagagtatt tetaaagtat tagtaaaaca ttaggtggca 480 geggaetgea tgecaagggt tttgaaagtg tgttcatggt aggettgtge acaaeggget 540 aatttqqttq aaaqatqttc caqqqctatt tttatcttaa tttatattt attcaqaacc 600 cacagaagga tggcaatagc atgtaaatcc cagaaagctt catactttcc ctgaatgcac 660 cattattttg gcaatcttaa aaggaaagca acacttccac gatttcacag ggagctctga 720 acatagcaaa tgtttactgg agggacatgc atgtcctttt ttttaatgtt tctaaacagc 780 atatgtgcaa atgagatttg aaatgagggg tgtatgtatt ttccacaaat ccctaattta 840 ttaatqtatq tattttaaat attttctaat qqcctttaaa aqaattaqaa atqqattttc 900 tttatttaaa attgagtett ettteagtaa taaattttta ettgagaaet eeagtaagat 960 tteteetete ttaaataatt gaeetgeeca agee 994

<210> 19 <211> 81

<400> 19

tacatatgat caggogaggo gtocactgca totttactgg cogtgocqtt ttacaaqctt 60 actetteaat ttttteatea qtqttteata attttatttq taqaqqqett ateaettett 120 tqtttcaqta tattcctaqa qtatattata ttatttaqta qctqtatata aaaaaqatta 180 ctttacatgg tttatattat ttagtattag ttcatataat agagetteat acgaaattgt 240 aatatgatta tttattatac ctagtaggat aatgcagtta gtgtttctca atctactaac 300 taggttaata tttactagtc aatactatca gtcttattgt tacaaatcat aaaatattta 360 tatattatgc caaaacaggc gacaatttag aattagctct tcttacaata tatagagtag 420 cetatatata tattetaete tatataagee tgtttaetae tggetaagga ttteeagttt 480

^{211&}gt; 812 212> DNA

<213> Homo sapien

taatagatag	aatagggagt	ggtagaaagt	gagcatcctt	gtactatggt	ctcattcttc	540
agaggcaaat	tctttcagct	tgttcgtcca	ttgttctatg	gatattatct	gtggatttcg	600
ttataggggt	ggccataata	tatatagttg	atgtctgttc	cttctatgca	tggttatgtg	660
tagtcattgg	ttatcaagaa	gggattttga	attttagtca	gagttttgtt	ctgaatctat	720
tgaaatgatc	atacggcttt	tgtcattaat	tctttgcata	tgaatgtata	accttattta	780
ttagcatatt	tcaagtatct	ggcatcctga	aa			812
<210> 20 <211> 615 <212> DNA <213> Home	o sapien					
<400> 20 ggtacaaaga	ggtagcttga	gtattagtgc	aatatccagg	taaaagtgct	teetttgtgt	60
tcgaagcctg	acaaggatgt	tctagaggtt	aactaactta	aaaaattccc	ggctaaaatt	120
ggaaaccagc	cacttctcca	aggageeeca	attcctttca	ctgggaattg	gccctttcag	180
attagctctg	tgccctctga	catggcttga	aagggctcct	actggctaat	atgagacccc	240
aagaatatgc	tcaaatgaaa	tggaacacca	agtatgttta	aattcatgag	ttatattaat	300
actaaaaaga	tcctctttct	tttggagact	ggtagacact	aactcatgtt	ctgaaaatct	360
aaggaaagaa	taaagcagtc	aaactacctt	tcctatacag	aatgcatttc	agaataatca	420
actagttgaa	gaggccaagt	tctttataga	agaatcacag	gtaataaata	atagaactga	480
aggcaatgac	cgaattagaa	aatgtcctat	ttttgtgaca	atttgaggat	aactgaacac	540
aaactaatta	gtggtgacac	ttaagggact	ggcggtaatt	tttgttaggc	gtgataatgg	600
gtactgccgg	gcggg					615
<210> 21 <211> 825 <212> DNA <213> Hom	o sapien					
<400> 21 aaaaaaaaag	ggggtaaata	tggggtgaga	ggtacagaca	ttaatcaaat	tatcacaaca	6
taaattaagc	catggtaaat	gttacaaggt	aaagctttga	aggcatacaa	aatggatgca	120
ggaatgccca	gcaggaacag	atctaggtta	tgggatttca	aaaacaaaac	acatcatcta	180
gtgaggaaag	ctcatcatct	agtgaggaag	acttgtacaa	agaggtagct	tgagtatagt	24

gcaataccag gtaaaagtgc ttccttgtgt tcgaagcctg acaaggatgt tctagaggtt

360 aactaactta aaaaattccc ggctaaaatt ggaaaccagc cacttctcca aggagcccca 420 atteetttea etgggaattg geeettteag attagetetg tgeeetetga eatggettga 480 aaqqqctcct actqqctaat atqaqacccc aaqaatatqc tcaaatgaaa tgqaacacca 540 agtatottta aattoatgag ttatattaat actaaaaaga toototttot tttggagact 600 qqtaqacact aactcatqtt ctgaaaatct aaggaaagaa taaagcagtc aaactacctt tcctatacaq aatqcatttc aqaataatca actaqttqaa qaqqccaaqt tctttataga 660 agaatcacaq qtaataaata atagaactga aggcaatgac cgaattagaa aatgtcctat 720 ttttgtgaca atttgaggat aactgaacac aaactaatta gtggtgacac ttaagggact 780 ggcggtaatt tttgttaggc gtgataatgg gtactgccgg gcggg 825 <210> 22 <211> 637 <212> DNA <213> Homo sapien <400> 22 cgcagaattc ggcttagcgt ggtcgccggc cgaggtaact taataaggtg aaggctaact 60 aaggtgttet teteattgae ettaagagtg teteaattag tteecaatta gteeteeage 120 ctcaattaaa agtaaatgga ataataaatg caaaataaga gatttcaccg gagaacaagc 180 totqoacaaa aqttcacaat tqtqoccact ttgtaactaa ttgagaatgt gaatttagac 240 aataatgtat agagttaaca acaattaaac ctcqtaataa qtaagtgtgg tgtgttttcc 300 aacaactgtg aataaccttg ggaagtaatt aagtttctgt ggtaaataat gaaagaaagt 360 420 qttaattqaa qqaqaaaaaa qtqcaaqtca cacaattgtg gttttgagaa ataacgtgag ggtttcacaa ttcacaagaa gaatacacgg tgtttttttt ttgctattgt tatttgttgt 480 gttttactgt tggagacttt ctcaaaaacc aatgttaaat aatgcaatgg tcagttcttc 540

aatgaagaga tgcagtaaac cgtattccca agtgttttga ccacttttt tttcttttt

actttaagac gatttctcag aactgttgtt ctcttgt

600

637

```
<210> 23
<211> 817
<212> DNA
<213> Homo sapien
<220>
<221> misc_feature
<222> (496)..(496)
```

<223> a, c, g or t

<400> 23 60 actggcaaaa qqaaaqqcac atagatcaat tgaacagaat agagagcata gaaataagcc acacaaatta ttoottttcc aqqcaatttt aaccaaqata atacaaaaaa aaaagatcag 120 cetttequae auatqqtqcc tqcctatttg gccatccatg tgtaaaacat gaacatcaat 180 ccatatctca caccatattt aaaaqttcac tqqaaattqa tcagagacct gaatttaaaa 240 ttaaaattat aatgtcatta taggaagaaa atacagaaaa aacgttgcga tttggggtta 300 qqtqaaqatt tcttaqqaaq qacacaaaaa gcatgattca taaaggaaga acgttaataa 360 attagatttc agcaaaattt aaaaattctg ctcttcatat aacattgtga aaaaaatgaa 420 aggacaagcc caaaacaggc agaaaaaatg tttggaaaat agcctacttc cagaaaagac 480 tggtaaccag aatgantata ccagaactgt ttaaaacgtc aatattaaag aaagacaaac 540 caacttaaaa gtcgggcaaa aagattctga agagatactt catcccaaga gaatacagat 600 cgcactatgg tcaagaaaca cacatgcaac aataagtctc aatattatag tacagacgga 660 720 gaacatgtaa atataaaagc acaatcgaga taccatctac aagctacaca ccgtgttatg 780 atggcatcta acaacaaatc tgacaatgta agatgcttgt gaggatgctg cagtaactga aattotoatg catttactgg tgggagtgca aaatggt 817 <210> 24 218 <211> <212> DNA <213> Homo sapien <400> 24 acttacttgc gcaatccgac tttggttaaa tacagccctc ctacgttatt aggtgtccct 60 atotgotgaa tgtgacaggg aacaaaaaca catacaacgt gotgactggc ctcacttttt 120 180 atttaaqatc aaaatcqtta agtggtccct cactactgct agcaatcttg acatattttc 218 ctaatccggt ccattcttcc atcctcccag gtacctgc <210> 25 <211> 823 <212> DNA <213> Homo sapien <400> 25 tggaatccaa tggacgagct ccatcgatta ataacggcgc catgtgctgg aattcgtgat 60 ttcgagcggc gcccgggcag gtcaatgatt agtcagaagt ttccctataa tgccatgagc 120 tagtaagtet tecatgetet gecatggaet ceatgtgtgt aggttagggg cacaccetea 180

totcacaggt attttacaag totgactata gccctgaatt attgctgtat acagggtgtc

300 aaaqtcaact aqaaqatqac tqqcccqttq acaqqqtctq tcatacaqct tttqqqcatt gtatacagct tttgcacatg atatatggta cttctcagag gcccaaaaaa atatgttagg 360 420 aacttttcaa agaccctatg ttaaaatcac atgatcccaa gttggatctg tacctggttg ggcagtcgtc agcttcagct gttcaaaaac caacgcgcac ggttcgattc gtatctggac 480 atgccttggg atagaacttt catagcttgg aactcaggag gccaggtgac acagtaaaca 540 tettgegaac agagttttet caggaacttt geaaacacag gttacagtte tgacaacttt 600 tectgecatt eggegaatat titgaagage tetaegtatt eececactea actagtgtga 660 ggttattggt tttccagtaa aggttacgta cgtatggttc ttttttactt atttgagatt 720 teteacetae tagagtgeat ggeatgatea gggteatgga acteacetet aggteaggea 780 tctctgctcc gctcttatgc tggcccggcg tgcccaccac ctg 823

<210> 26 <211> 1132 <212> DNA

<212> DNA <213> Homo sapien

<400> 26 ctactaaatt cgcggccgcg tcgacactga gttcagtaga gctgcagaat acagttatta 60 qttttaqttt tttttttqt agatttcata gatttttata tgaattagca tagtgtctgt 120 aaataaaacc atgatatgtc taggtttgaa tatctttgat ttcatcctaa tggagtttgt 180 tgagaatctt atatgtatag ataaaagcca tcgaattttc tgtcagattt caaaattttt 240 agacatgata tgttcaaaca ttctctctat ccttatctct ctcatctgtc tctggcatgc 300 tcatttatat ttgactatgt ttagtggtat cctacaggat gctgaattgt gtagccactg 360 420 aaatctctgc ttggttagct tagttgtcag ccaatgatta gtcagaagtt tccctataat 480 qccatqaqct agtaagtctt ccatgctctg ccatggactc catgtgtgta ggttaggggc acaccctcat ctcacaggta ttttacaagt ctgactatag ccctgaatta ttgctgtata 540 cagggtgtca aagtcaacta gaagatgact ggcccgttga cagggtctgt catacagctt 600 660 ttgggcattg tatacagctt ttgcacatga tatatggtac ttctcagagg cccaaaaaaa 720 tatgttagga acttttcaaa gaccctatgt taaaatcaca tgatcccaag ttggatctgt acctggttgg gcagtcgtca gcttcagctg ttcaaaaacc aacgcgcacg gttcgattcg 780 840 tatctggaca tgccttggga tagaactttc atagcttgga actcaggagg ccaggtgaca cagtaaacat cttgcgaaca gagttttctc aggaactttg caaacacagg ttacagttct 900 gacaactttt cctgccattc ggcgaatatt ttgaagagct ctacgtattc ccccactcaa 960 ctaqtqtqaq qttattqqtt ttccaqtaaa qqttacqtac qtatqqttct tttttactta 1020 tttgagattt ctcacctact agagtgcatg gcatgatcag ggtcatggaa ctcacctcta 1080 ggtcaggcat ctctgctccg ctcttatgct ggcccggcgt gcccaccacc tg 1132 <210> 27 <211> 1001 <212> DNA <213> Homo sapien <400> 27 acttttctga agaggagtaa tattaccata tttcaggttt taaaacgtca tttcagaaaa 60 aatatttqqa qacaqttqqa aqqaaqqtaq aqtatatqca aqqaqaaqqa qacaaacaaq 120 atgctaatgc aacagggcac caaacaccaa gaaataagca agtaaaacat ggagcgggaa 180 tcccaqtttt ttqcaqaaqa ttaaacaqaq aaqccttqaq aqacatqtat ttqqtataat 240 acacaaaata tcatcatgca tttaatatag ggagtgaggg aatgaaaggc atcagaaata 300 actiticatet etetggettt gagaaacatt gagtagacaa gtggggtgge atttaagtge 360 agatgacgga aacatggaga ataatatatt ttatcgaggt agcgagttga aggatgatat 420 gaatgtgtga accactgagt ttgaagtgca cttgaggaac tccaacgtgg gagagtgtta 480 aatagccaaa tgctaaatta gaaacattca ttgaaaaatg tatttttagg agaacatcat 540 qacattaaaa cttaqaaaqa acatattttt qaataatacc atttatattt atqttctqat 600

taacagatta caaagtgccc taaaaggatt cttttttata aattattgat cattcattta

aatgatacta gattagagaa tatttacatc acctgctata agagtgacag catattagcc

aatggtattc atgctcgact atgcaattca gaagcaacat caaagaatat tcttcattgt

qttcataaac tttctcttaa qtqaataata aaqaaaatqt aatqcctaqc aacattttct

agcaattatt cttctgcaat gcatgaatac atatttgtgc tattgtagca ttaqqttcaa

cctaattaac tcaqaaaatc atttatqcac caataqccta tctttcatqt aaqacqaatt

ccagcacctg cgccgtaaaa gatggggctt cgaccaactg g

660

720

780

840

900

960

<210> 28 <211> 554

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (533)..(552)

<223> a, c, g or t

.100. 00						
<400> 28 tcgggagaat	ggcgtgagcc	cgggaggcac	gagcttgcag	tgagctgaga	tcaagccacg	60
gcacttccag	ccttgtgaca	gagtgagaat	ccacctcaaa	aaaaaaaaaa	aaaacttggg	120
ggagttggat	taaaaggatt	ggtttgtgtt	cttgaactta	aacattgtta	tttagacctt	180
ttttctcctt	tatttatttc	ccttaagtta	attaattagc	tattaattta	cttattttat	240
ttattaacaa	tttgctttgt	gtatttaaat	tatttttaag	ttaattctac	agaattgatt	300
ttaacagcat	tattgggtta	ttgcattaga	tttattattg	caaattactg	cattcatttg	360
tattattaag	gggacccgga	gcattccagt	ggatttttgg	tgttccacat	tggggttcct	420
tggaaccaat	ttcccttaga	gattactaag	ggggtgactg	tattccactt	ccctttctcg	480
gattgaggac	aattggtgca	ctgagcattt	tattattctc	tttaagtttg	tennnnnnn	540
nnnnnnnnn	nnaa					554
	o sapien					
<400> 29 agaggcgggg	acgagaggta	cagctgtgta	cgagctccga	tctgtatacg	gcgcagtgtg	60
ctggaatttc	gagcggcgcc	cgggcaggta	ctattggcat	ctgataggta	gaggccaggt	120
atactgctta	acagtcctgc	aaggtaatgg	gaagcccccc	acaacagaga	agtatccagt	180
tcacatcage	acgtgctgaa	agttgaagga	attccttcaa	atactgctgt	tttctctatg	240
tattaagtaa	atatatgaca	ttgtcaaaag	tgaaaataaa	aggcttttt	aattcctgtt	300
ttcttcaacc	aactggaatt	tctggtgttc	cttaatggta	aaatgaaacc	acctgtctaa	360
tcattgctca	aaccagtaac	tgaggctttt	tttttttt	ttttttacgc	aatagggtct	420
cactcgtgtc	actcaagcgg	cagtacctcg	gccgggaccc	acgctaa		46
<210> 30 <211> 714 <212> DNA <213> Home	o sapien					
<400> 30	gctggcattc	gggtttcgag	caacacccaa	acaaatatta	cageeteaga	60
	tgaaggataa					120
	atttagccat					180
	cttgtcattc					240
ugaguutgga	congruents	ucceatgatg	-saccegge		ccaccccda	241

atagattggt agactaaatg ctcccacaaa gtcccttcca gctctaatgt gatatttcag 300 qaaaqaqqtq cqqcatattt ataactcaca gctctgccgg caaaagttcc ttggtgcatc 360 ctgtgctgct ccctgggccg tgttgtctct ctaatccttt tctcagctct tattcctgtg 420 attgattcct tcaaaagagt tcacattgta acagctggac aatggatgac caaatgagac 480 gaacattttc attgtgaccg taagttaatt gaaaaatgtc acatgttaca ggaaacgggt 540 gtaaacaaat tttagagttc tcgtgaactt gtataaattt gaaattacct caatctgccg 600 tttttqqqaa aaatattqcc aqttqqtcta qtaatattat actttgaata aagcttttgg 660 ttttttggct ttgtgaaata atttgcttgt cccaggtgct tcatgactgt ctgg 714

<210> 31

<211> 1064 <212> DNA

<213> Homo sapien

<400> 31

ceggegeagt gtgctgcaag tgeggtttac ttaaaaacca cacagcagac agcatggaca 60 ataaaataaa agaagatcta atatatcaaa aaataacatt tccatagtcc ctataaaatc 120 tggaaaggat ttatctggaa tatttcatag tagtttctca ggagcaaaca gaatcctttg 180 cctatattta ttgtgaaatg aacagaaaac atcaaccaga gtctataata gataaaagct 240 ctaaggagtt gagtaattat gttgaaaacc agttcgatct tggaattaat aaagagtctg 300 360 aaaataggaa ccagggtcac aaagaaacct gatttgaatc ctggcttaag ccttataagc 420 tataggcaag taattaattt gagteteett ggaetttetg tttetgagte teattttet 480 540 aatgttataa aataggatat aacaatatca cctacctcta taaggataca gtgaatatat 600 tgaatattaa tttgagatat tcccggcaaa ctacctaaca gagtaacttg gcaagtagtg taqtqctcta atataatqtt tatqttaaaa tgacttgagg aatcatgaat acaacagaaa 660 ctgtaaataa tatttcctaa ctagtctcct ccttctctga ggcttctagt ctgaggctaa 720 780 acttctaggc tattaaggaa ttcgaaatac agcttctgga gagattagat ccaccagtct ttctccactg tgagtcaatt ctattaaata aagtaaatta taattttcaa acagctccaa 840 cgctggttgc aggtatttca catttacaac atatgttcta acttattttc atcatctaca 900 ataaaaaact ggtatgttta atcatatatt tcaaataagt tatctgcatt actgacaaca 960 1020 ctaqcataca tattttcttt ttaaaaaaatt tatcttttaa attgacaaat aataattata 1064 tatatgtatg tacctcgcca agccaatgtc cagcacactg cgcc

<210> 32 <211> 905 <212> DNA

<213> Homo sapien

<400> 32

cggccagcag tgtagtaggc attggggtta ccagtggtta cgcggccgaa ggtacaatta 60 ctaggattca gagctaggtc tgtatttgtt gatacctgaa agtattttaa gggacagatt 120 ataaaaatcc catcattctg ttgagaaggc aaatgagaat agcctgcata ttattctccc 180 cagattttct ttctgtggtt cattcatgaa attgcatctg aacatgcaca gcaccaagca 240 ccctttgatc tccaatggtc atccaagtgt ggtagccaac atcattattg cagcaactca 300 ttcaaaagca cattgttcca acacgcatga ggccatcata acatgtgcat ttagtgccaa 360 cactgcaagc ccaaagtcac ccatcgcaaa caatcacagc acgcacttag gcaaacaagg 420 gaaggacaca ccacaaccaa tgagcaccag ttacaccgtg tcagcttcat gcatgtcaag 480 cattcatgtg gggcagtggt tcataacatt ctcttatcaa ccaattgacc ttcccaccac 540 600 acaaaaatca aagccacata agaactgggg agtatatata attcccctca ggcctaaaac aaagtgcaca cttgttcccc accacattgc ttaggctcaa aaattaacta acaaatgttt 660 tcaaagccaa cttagactgc ctgacacata gaaaatcatc aataagtgtt atcttgttat 720 tcagttggat ttggagtgaa taacatgtat ttcataaata tcatagtaac atactgggaa 780 tgaagagtgc ctacgtagaa accttgtctc tttgcactaa ttgtctgtgt gacctctagt 840 tacttaatat ctatctgtgt aagtggggag aatgatagta cctgcccggc gtctcgctcg 900 905 aagcc

<210> 33 735 <211> <212> DNA

<213> Homo sapien

-400>

ggcggtcgac ctaggtttaa ctgtaccgtg cgtattcagg cttgggcagg tacccaacaa getgtggaat teattattee ttteataata cacagetgag caetgacaaa aagttagage catatgctga gccatcgagg aagctcaacc aaacttccaa aggatttaaa ttatcaatat tatgttctct agaccatgag cttcttataa atgcttaata atcactagca aaaacaataa ctagaaagcc tccattattg tgtgtatgat taataaacac actttatttt tattaagctg acttatggta ataatacttg tagtgatgta tgctgggccc attcccagag ggaatgattg tccaattatc catcgcaaaa gaagaaactg ctgaataatc aacgtatgtt aaggtqtcca

60

120

180

240

300

360

ttctctagaa	agttagataa	tagaacaata	ataatcacgt	ccttaggtaa	tggtaggagg	480
aaggcaactt	atgagtgatg	ataagtaata	gaaactaata	taagtagaaa	actattatac	540
aagttgagaa	ggattgacga	agaaccaaat	agttgtattt	attactttta	aatacatcaa	600
tataatttga	taacctgaca	cctgtgagat	ggcatcaaga	aaaaaaaaa	gagggaaaag	660
gggcattttc	cctacccttt	tggggaaata	aggggggaac	tttttggggc	cttggaaact	720
tectaagagg	ggttg					735
<210> 34 <211> 396 <212> DNA <213> Homo	o sapien					
<400> 34 ggcttacaac	ttattggcta	gaattgagtc	ccattatcat	cactggacag	caggcatttg	60
gaaaggtaag	tatttccaac	agaataaagc	caaggttctg	taaataatgg	agaaaggaaa	120
agtgggcagt	gagtaggtag	acagcaatac	tagccccaag	ggaagagaat	gtcttggggc	180
tagtgacaaa	tgcctaaagt	gaatgcctaa	agtgacaaac	ctcttggcct	ttgcatttgc	240
attcactagg	acactgtctt	tgggaataag	ttagaggaag	aaaagaatag	ctgaatgagt	300
gaatgaatga	atcaagcgaa	cttgactgtt	ctccagaact	ggggttatta	taactactta	360
caactcttgt	gtacctggca	atgtaacgga	ctgcac			396
	o sapien					
<400> 35 gtgaagacgt	gcataatatt	atactgtgta	atgaacctaa	atacccagaa	tatgaataca	60
ataagcagca	cacactaaga	gaaagtaagc	agaccaatgt	gccttgatga	acacagattt	120
caaaaattgt	cgaggaaata	tctagactaa	tctgaattcc	aagcagtcac	catgtagaag	180
catataatcc	gtggccagat	acagtggtct	cacgcctgta	atctcagcac	tttgggagcg	240
actgaagtgg	gaggatcact	tgaggtgcag	gagatgttga	cactageetg	ggcaactctt	300
tttctgtaga	gactgttctc	tacaaaaaag	taaaataaga	accaaataat	tttaaaaacc	360
atggatttga	actatatage	tatttttaag	gttgtaatco	aaatggctgt	tatatatatc	420
tctatatgtt	ctttgcaaca	cttaaacttc	tattaattto	ataacattto	aaatgccagt	480

tattgaggaa gtcacatttt ttctttttgg cagataatct tacagcacca tcttctggta

taagatc	act	gtgcacagtc	taacaatcag	aaaataacaa	tcatgttact	atcttagttt	600
tactata	ttt	agtaaaactt	tacagt				626
<211> <212>	36 849 DNA Homo	sapien					
	36 tca	atacatogco	aggcggtcgc	ctagtcgtta	actggaccgt	gcgagaatac	60
					gttgtgaaat		120
					agacctatca		180
					gggaaaaaag		240
					ggagtcagaa		300
					tgcaaacaaa		360
					aacagtagag		420
					aagtattatt		480
ggtaatt	cat	aaactctctt	gcataagcct	aggaagatto	cagagaataa	tgaacaaaga	540
_					tctagctact		600
					agttccaaac		660
attttt	att	gtaactttgt	ttttaattga	atccacaatc	atacttcgat	tattggccat	720
gcaatac	tta	atttttacaa	caaacctaaa	aacaaaagca	aaaaaacaac	ccatttctga	780
ggaaatt	acc	gtgcaataat	cgaacatatt	catttgctcc	taaaaatttc	gtgcttttac	840
ttataaa	atc						849
<210> <211> <212> <213>		o sapien					
<400> tatagto	37 gacg	aacattcaca	gaccgtcagc	catgttaccc	agctgggccg	agtcggatcc	60
ataataa	acgc	cccagtgtct	gaattcgcta	agcgtgtccg	ccgaggtact	tcatcaaatt	120
aacagct	cag	gcctatactc	tctcccaccc	agtgcttaaa	actcatcttt	atctgcttta	180
tatcaga	agct	cgcactcgag	agaatagagg	agatgttccc	accagactaa	ccctctcata	240
gaaaaca	agct	ataaactctt	ttaaaaatat	agaaaattaa	ccctaaggcc	ctaaaaagtc	300
accass	acad	tgagaaaatg	gaggaggta	gaggaggt.t.	ttgcttagga	gaatgctgag	360

tgcgttttat	agttctttgt	cttctggact	cagtcaacac	taggccagac	agctaaaact	420
gggatcaaaa	atcagcagcc	ttttagcttg	gataatgagt	agacagtggt	gtgaccacca	480
ctgctggaaa	gccagagggg	aaatcctgga	aagggggtga	ccaaggagag	tgctaaattg	540
ttcatataaa	ctaagcccaa	atctctggct	catccctaaa	ctatgcatag	cacaggggca	600
gaccccaaga	ageccageca	gggctacaca	gatctgaata	gatatttcat	ctgctgccta	660
cctcaaagga	aaaagagttt	gagtctgagc	ccagctaatg	ctgctgaaac	aaacaagcaa	720
aaaaatcaga	cctgcccggc	gccgctcgaa	acccgattgc	cagcacactg	egece	775
<210 > 38 <211 > 251 <212 > DNA <213 > Hom-	o sapien					
<400> 38 ggtactatgt	atgttaaaaa	taaaccatat	ttaaggaaac	atattctaat	tatcttactt	60
atttggagat	catatctatc	caaccccacc	ctggaacccc	ggagagaatc	cggaagtaag	120
caaaagtcaa	atagaaccac	aaaagtatat	actagagttc	aaacacttgg	actcatttgc	180
tctgaccttt	aaaccactat	tctttttt	tttttttat	actttaatgt	tttagggtac	240
ctgcccaagc	с					251
<210> 39 <211> 644 <212> DNA <213> Hom						
<400> 39 gggaatcaat	ggtcgactcc	atcagtgtac	ggcgcatgtg	ctgcaattcg	gtttactctc	60
ctttctaaca	gtttaatggt	gattagtaaa	tacaaagtcc	ttttttcca	aaggtgtttt	120
ctcttttagt	cattacaact	ctaaaggagt	caactccttt	ttactttagt	tgtatccttc	180
cacttcctaa	ttggggcttt	caaggaaatt	ttatagtaac	tgcctcagac	cacgaattag	240
tctctccttt	ctaaaaatgc	acctttcaag	ttttggtttg	cgattattgg	ggcagggaag	300
tgagggaaaa	tgatttacac	ttcctttctg	tggcttccta	gagcagtgct	accaatctga	360
catttttacc	agctctgtat	ttacagtgat	tataataagt	gggaaaaaaa	agtagttagt	420
agaatagcag	attggtcttc	tcttgggtag	tgacaatgaa	gaccgatagc	gaacatagta	480
ttctattaaa	caaaaataag	tgctcaaaga	agtctagata	ttgttgctgg	agatatetee	540

aaaatgtcaa taggcaatga aattgggcaa tgtgcccgtg atatccaaga agaatctgtt

tatttgtttc	ttatgtgaat	tgcataattc	tcccaacctg	aagt		644
<210> 40 <211> 952 <212> DNA <213> Homo	sapien					
<400> 40 cgagcgccag	atgtagctgc	agtcgcgtta	tgggcaggta	cttgttccca	tgttctagaa	60
gaggggaaag	caagaagatt	cagtcctcct	ctgccctggt	tctgcctaac	aaccacctgt	120
ggaaagatca	gtatcttatt	tcttcatgat	actacaaagg	agcagtataa	tttgctttaa	180
gaattctgtc	ctactagatg	tcatgttttg	gtgctagaaa	gatggttgac	tatggctttc	240
tgtggtgaac	aactgggatt	tcagagtaaa	tctgagtttt	tcatatgtat	tgccactcta	300
tgtaacaaac	tgcaagaaag	ctacagcatt	actctctagc	aaaatagtcc	caattattat	360
atacgtattt	catacaggtc	agagaataga	ctttactata	atattactat	agaaagtttt	420
acttaggggc	aaacaaatac	agatattcat	gaaagctaaa	caaagagact	agagaattaa	480
gaggaaggaa	acccactgca	acactgttct	taatttccct	ttaaaatagt	gtccatctat	540
gagagtctat	accaaaaagt	gttcagtata	ctagaaatac	caaaaaggcc	ttgttaaagt	600
gatgggcatg	gactattgaa	tatatatctt	ctgttggttt	cgtgaatgtt	cagttcttaa	660
acgtcccaat	gcgccattct	cacctacact	tttcaccctt	gatgtctgcc	ccctcaattt	720
gtctggattc	atttcactcg	attctcgtcc	gtactttcat	caaaatgaat	aagaacatac	780
agacactaaa	agtgacttta	gagcactaaa	aatattagct	taatataa	gaatgaccaa	840
ttcaggatat	taaattaggg	tgttgttagt	gtctaataaa	atgcatcagg	gaaataggta	900
attgttggat	accattgagc	ttgactgatc	cttatagtag	aagttgaaat	at	952
<210> 41 <211> 793 <212> DNA <213> Home	o sapien					
<400> 41 aatccagatt	cgttagctgt	cccgccgagt	acaaaaacat	cataattcta	atttagaatt	60
atctgcgtat	tggtcagcac	ttccgtttag	actattgtta	ttttctaata	tagtcatatg	120
tctgtgtata	aacttgcttg	cttggtgaag	caaaattacg	ttttaaaaaa	gtgggggacc	180
tcagcagcta	gtctaaagga	acacgaaaaa	ataaatgtga	aatggtttcc	agactttcac	240
taaaggtaat	ttattattca	gccattttag	tcatccagtt	cacaaatata	cttaagatat	300
tctqtqctat	ggtatttgct	gtttcccagt	tagatccatc	actctacaca	tttttaacag	360

tatacettte tactatgate acaegeaage taaceegeta tggactacag ettttetetg 420 cttccaqctt tgqttaaagc aattggtgcc ctggcaagag atatcaggca gcaaagtaga 480 ttgaggtcca agtgttttta cccactgctc cataaaggtg tcctttgggc cgtattactt 540 aactgatgta tootactota otcaagggat ottoattgta ttactttoto caccttgtto 600 cettggatet agggagtggt ggccaageet atteactgcc acatteacat gtetettttg 660 720 taaaaaaagtc ctttqtaaat qcactctctt ctaatgattc caactctggg tgaaccatct atttaccacc gtacctgccc ggcggccgct cgaaaccgaa tttgaatttc atcaactggg 780 793 gcgtcaacat gat

<210> 42 821 <211> <212> DNA

<213> Homo sapien

<220>

<221> misc feature <222> (687)..(687) <223> a, c, g or t

<400> 42

acctgaagac tettttgact ecetetette taacataagt caatggeece aaatggagte 60 atgtggttag ccaggaggtt gggaataact catgtggagt catatgtcta aacttggagc 120 cataaggaag ggaatacatg cagcaaagag ctgcttgctt tctcaacatc ttgtaactga 180 gaaaggccca taactcccaa totcatttcc tgggaattct accagcagct gcgataggat 240 tacaaaaqtt qcaaqagaaa gggattaata accttgatga gctgaccatc tagctgagaa 300 360 aactgaacct atagaaagta tataactggc gaattgtata gaacagatta ttactacacc acaaaatttg ggggatgtac tctgaagcgt cagaaagctg ctcaacacaa agggaactcc 420 cacaatgatg cgggttatca tcaaagggac tccagagtgc caatctgaaa gagctcccaa 480 atgggcagag catagaatgc atatgaatgc caaatataaa ctcaaatact atgtggatta 540 ttaccgcaaa gttataaaat aaatatccac tgagttccta ctagatataa ataaatggat 600 taaatacagt taatatatag aacgagtcaa atctgcccat ccaggaagaa ttcgtaaata 660 attatattqt taaaactcgc acctctncaa cggaggcatg aacatggaaa agagaagaat 720 aaaaaagagt aattaacagt agagaaacct ggcaaatatc cacttcaagc caggtcatca 780 aagctaacgt caacagtgtt aagttcatgt tactagaatg t 821 <210> 43 <211> 1053

<211> DNA

<213> Homo sapien

<400> 43 qqcqcagtgt gctgcaagtc ggtatgggca ggtactacta gacagcttat taaacagagc 60 gaccttatta atagttggaa agaaacaagg agtgatctgt tgccctcttc ctgactttaa 120 tgaacacctt tgatttgttc atatattatt taccattatt atggagactt ccagaccata 180 240 ttttcaatta gttttcatgt cttacacaat tatataccta acaagctcaa agggcgatca 300 tctaaacaaa acattgaatg ttatggcacg tggttatgca atcagcataa ttgttagtct 360 taaaaacagc tattcaatta tatgcttaaa taatcagcta aatactcaaa agaaatgata 420 480 tcaatacatc attattaaaa tcatgaaaag aaagcaacgc tgcatgacca attattctct acttatttgc attacttgac tacaaaagtc ctcaacaata tatctatcaa catcgaattc 540 cataaaatag aacaaggcat tatggacaca tagccaacgt ggaatttatc ccaggtaatg 600 caagetttgt tatagettte ttgaacaate cagtttagta taaataacae taacatcaae 660 agaaataaaa gatttaaact atgtgtatca tctccgtaga aaaaggaata gcacaqtgga 720 gaaaatccac acccctcata cacgggaccc ttacccaact agggaaagaa agagagcttt 780 840 aagagtatcc tgtgaacaat ccacacagct gtacatactt caaggatgaa tactgaaagc 900 tttccccttt aatacatcat gaatagcaat acaaagatat ctgctcacca tttctattca 960 acattgtacc tcgggccgac gaccacgcta agcttgtata taccgccagg tcctagtaaa 1020 1053 gactgggaaa gcctcgccat gtatctgaaa tgc

<210> 44 <211> 860 <212> DNA

<213> Homo sapien

<400> 44

cagttgggtc gagetegete cacttatage ggegeagtgt getggaatte gggttgggca 60
tggtacaatt acttageace eccetgteag aaataaacag atceagaagg cagaaaatea 120
gtaagaacat ggettgaact aaacageace atcaaatcaa ctaaaactta tttaaattet 180
ggtagactac tttatecage aacageagaa taacactett etcaatgget eatcatggaa 240
teatttacca agggeagace gacattetgg geccataaaa gacacetgaa catcacttca 300

qaaqtaatac aattcataca attqtttqct cqtcaqtact acagtggtaa ttaataatag 360 gtaatcaata acaaaaagtt agctgggaaa tcctaataat acttgaataa ttaaacaaca 420 cacttttata attacattta tacqtcaaaq aaqaaactct caaqaqaaqt tgaaaaaaaa 480 540 taggttgaat tataataatg atgaaacata gttgatgagc ttttaatagt tgataattat gacggctaga agaaacgaag aaactactta ctttccgttg cccttttaat aaacatcatt 600 atatetttag gaattatgeg atattggtaa ttttaaaata aaggtageac tateeaatat 660 720 taataactat gaagtttctg gttctgggga gaaaaacaag gccaatgcag agaaagagaa ggaacacaca atgctctcta aatttgagaa attgaagtct aatgcgtggc tatggaaaat 780 ggetetttt ttttttttt tgecaaaagg attatetetg teatgtette aacettaagt 840 tattatggaa atgctatagt 860

<210> 45 <211> 895 <212> DNA <213> Homo sapien

<400> 45

qaqacataac aatatttaat gtgtatgtgc ctgacaacag agtataaaaa tatgtgaggc 60 aaaacccata gaaatatgag gagaaataaa tgcatacagt atcataattg acttcaacac 120 tccaacagaa atggacagat ccagcaggca gaaaatcagt aagaacgtag ttgaactcaa 180 cacaaccatc aaatcaaata gatataatgg acatctactg actacttcat ccaacaacag 240 cagaataaca ctcttctcaa tggctcatca tggaatcatt taccaagggc agaccgacat 300 360 totgggccca taaaagacac otgaacatca ottoagaagt aatacaatto atacaattgt 420 ttgctcgtca gtactacagt ggtaattaat aataggtaat caataacaaa aagttagctg 480 ggaaatccta ataatacttg aataattaaa caacacactt ttataattac atttatacgt 540 caaagaagaa actctcaaga gaagttgaaa aaaaataggt tgaattataa taatgatgaa 600 acatagttga tgagctttta atagttgata attatgacgg ctagaagaaa cgaagaaact acttactttc cqttqccctt ttaataaaca tcattatatc tttaggaatt atgcgatatt 660 ggtaatttta aaataaaggt agcactatcc aatattaata actatgaagt ttctggttct 720 780 ggggagaaaa acaaggccaa tgcagagaaa gagaaggaac acacaatgct ctctaaattt gagaaattga agtctaatgc gtggctatgg aaaatggctc ttttttttt ttttttgcca 840 aaaqqattat ctctqtcatq tcttcaacct taagttatta tggaaatgct atagt 895

<211> 449 <212> DNA <213> Homo sapien	
<400> 46 aagagaaaag ggactcagct ggtccgagct cgcctcagtg taacggccgc agtgtgctgg	60
ccattegggt ttegagegge gecegggeag gtaettaaag tetetaatat ttatgtetta	120
cctatgaatg ttaaaaagta acagttacct acctcatgcg gttgtgcaaa gattaaattg	180
cggtaatagc atttgaagca cttagcaatg agcctggata ataagcactc agtaaattag	240
togotattaa aatcaatagt tgtaatataa aattototta aaaaagtttt attagaaatt	300
attttaaaac gataaaaggt atcattagaa aaattaatgt aatgaaatta tttttttctt	360
gatgatattg tgttggtgag gcattagagt cgataaatac tagttgatta atttaactta	420
attaatcttt ttttttgaga cagagtctt	449
<210> 47 <211> 628 <212> DNA <213> Homo sapien <220> <221> misc_feature <222> (375)(375) <223> a, c, g or t	
<400> 47 ctgatccgag tegecteagt tgtaeggege egtgtgetgg aatteggett accacetett	60
tcagcaatat gaagtgaaaa ccgagatatt ttaagtgcgt cacccgagtt ttaaatctct	120
ataagaaagt gtgcttattt attgtgtaga cagttgttaa attgggttcc cttacaggat	180
ggattatcag tggagccatc tattccaccc tcttacaaaa cctcctctgc ttaaaataat	240
aactacaata acattaagga atactcacaa tatagaacga tataagttat gacatttaaa	300
agaacatgtg tagggggtgg acatacaatg atataattta tttaggaaat ggaaattaag	360
ttgctattag ccttnacaaa tagcctatta caactccaaa atgttttatg gaattctcat	420
ggtaaccaga aagcaaaaaa aaaaaaaaaa aaagaggga attttggcag aaaaatttaa	480
tttgggaatt ccaggtettt eteccaaaga aaatteeest eatttacaaa gaaagaeega	540
cagagaggaa gaacgggcgc attggtgctc ttaacacacc gaaagtgttt ccaaatacca	600
gaagtaagtc ccacctataa aggagtcc	628

<212> DNA <213> Homo sapien <400> 48 ggcgcagtgt gctagccaat tcggtcatac cctgcttgcc tatggtagag aggggctcag 60 gaggactcaa tcagatgact ctccatctgt gtcccaaatg actgggaagt cagtaggtac 120 tttatagget etagattttt ttttttttt cataattact tatettetet tttgetttte 180 tttcacccca aagcaaaaaa aaaaaaaaa aagggggttt ggtttgggtt tgggttttgt 240 tttttgggtt tcgggtcttt ttttttgggg ggaaaaaaaa aattggaatt tttaaaaata 300 tagtttttta ttttaagact tctcctgtag atatttttaa cagaattacc tatggtataa 360 aagggetata teacaatatt tttgaettat attttgegtt gataattatt tttggaegeag 420 gtggataaag ttttctccct ctacaaaaat gtgtgggtgg tgatatattc tagcggcatt 480 atgggtaagt aagagggttt tcttaaacaa atttttattt ttgggtttgg caataactta 540 attttaatta gttgggactt ccctattaaa agcagaattt ccttttagaa aat 593 <210> 49 <211> 464 <212> DNA <213> Homo sapien <400> 49 ggtaccaatt tatataattt ttgtggtttc tttaaatcat tccqatattt tttaccccca 60 ggttccttcc attgcttttc tttttttgga tttttctttc ctttaagata tttattttta 120 gaaatgtgaa aaaataaata gtagagaaaa acctgtcctt ctataggaag acataagtat 180 tgaaactact acattctaac taaatctgta aatttaatac aagtataatg aaactatcaa 240 taaaatgtgt tatataattt gatacagacc totgattatt tttcaattag gtottagtga 300 agatttataa ttttcttttc ataggtttta ccattttttc tgttaaaaat atttctgctt 360 atattactat tttatagctt ttattatatt ttggctaatg ctgaatataa aggaaaacta 420 ctgaattttt aatatttact tttattatct ggcattgtac ctgc 464 <210> 50 <211> 1018 <212> DNA <213> Homo sapien <400> 50 gtccagttgg tcgagctcca tccgtatacg gcgcagtgtg ctggaaattc ggcttgggca 60 ggtacagtat tagaaaccta tcaggtttct catagtgaga aatatgtgaa atattttcct 120

tgtccctgaa agagaaagaa aaagaattaa ttattatgaa atataacgtg agccttattt

240 ataaatgaag acttacacgg taggcggaaa ggctttggca ggacgcaatt ctgaatggag geccaagata gegcaaagag aattteteec aattetagea actetaaett teetgtgtea 300 cctaagcagg atacaatggt aacaaatgta ataactaact agtaacaatt taccaacaac 360 taacatacta cattaggact tetggteeca getecaaaca acaactteac gaacttgeea 420 accttcgtca ctctgtcctt acaaccagaa aacaaggtga acaaacttga acaaacttaa 480 ctgcatgtat ctctgggcct gctcagcaga cacctcgtgc gtctgtgcgg cgcaacaacc 540 cgtcccccaa aaacctggaa aacaagctaa tataagagaa actacaactc gagatctgct 600 tacettgeag taaacgetge cacatactgt aaactggeta agaccaetta cactggteac 660 tttctatcga actgagcgag gctgcagtgt ggactacgca taagagataa gaaactcttg 720 acccegtcag tetcagggaa tteccegeta attteatgge tttattgeet eccgaaatte 780 catcagaatg taagcggctg aagaaccaaa agtgatactc ttggggatct gctgagagta 840 aaggaaaaat aatcacctgt gcacaatact cttaagatat ttcttacata ataaaggcac 900 960 tettgeeteg tgtattgtta agacaacgca aaagagaaga cagaggegaa agecaacgtt atacgtagag teegtaaatt eeaaggteta aagaagaett ggeeaettte gteetget 1018

<210> 51 <211> 618 <212> DNA

<213> Homo sapien

<400> 51
tgcgagggtc cgccggggta atggagtatc tgcagaattc ggcttaccgt gaaggctatt
tgcgagggtc cgccggagta atggagtatc tgcagaattc ggcttaccgt gaaggctatt
aactgtgtat tgagttaaag cagaatactg tatgtatagt tatgttctta tagatttcaa
tatcttctca attttgaggt aagttgggga gtagatatac ctttccccta ctctgacgaa
atgttcgtct tccttccttt tcatttccta ctttgaaata gccaagatcg atagggacct
tcatatgata tatccaggat agtattaaca ggattggagg ttgaggagtg cattttctac
taggggagat accatatact ctctataacc gtgatacaat actcttcga tccctgtgct
cagggacatt tttagtaggt agcagtctag actagccct ctactacttt gtctattacc
tcagggcaag gaaagggaag atagtgatag tgacaggtc tcttctttt tctttccac
cacttgttc tccttccct ttccttacct ttcttgttac ccttaggtg tctctgggtt
ctgaatttgg atttcagcag aatggagtaa ttttataa actctttag ggaacctggt
aacccgactg cagcacc

60

120

180 240

300

360

420

480

540

<210> 52 <211> 917

<212> DNA <213> Homo sapien

<400> 52 caaaccggga ccctctaggt taatttgtgt tgaaagtgaa aagtgtaatt tccaaagaag 60 120 tgaagtttgt ataggtaaaa attttagacc gcaatttttt ttttttccaa aaactgtttt caggetagte tgtatgeact ggcagtetgg tttgtattga ccgttaggta ttgagtttta 180 ataaaatgtt caaatatgat ggacatacca cattatggtg agatgtgaat gaagattgtc 240 occoacacco ccaactgggt tgtccacago tgtattcagt agaattaact taaatggtee 300 agatactett caaaaatttg aataactatt tgggaccatt cagtaccgtg aaggetatta 360 actgtgaatt gagttaaagc agaatactgt atgtatagtt atgttcttat agatttcaat 420 480 atottotoaa tittgaggta agitggggag tagatataco tittoccotac totgacgaaa tgttcgtctt ccttcctttt catttcctac tttgaaatag ccaagatcga tagggacctt 540 catatgatat atccaggata gtattaacag gattggaggt tgaggagtgc attttctact 600 aggggagata ccatatacto totataacog tgatacaata ctotttogat coctgtgoto 660 agggacattt ttagtaggta gcagtctaga ctagcccctc tactactttg tctattacct 720 cagggcaagg aaagggaaga tagtgatagt gacaggttct cttcttttt cttttccacc 780 acttgtttct cctttccctt tccttacctt tcttgttacc cttaggtgct ctctgggttc 840 tgaatttgga tttcagcaga atggagtaat ttttattaaa cttctttagg gaacctggta 900 917

<210> 53 <211> 1055

<212> DNA <213> Homo sapien

acccgactgc agcacac

<400> 53
cggtcccagt gttattaatg acctgtcgat tcagcttact ctgttacagt agccagaaaa 60
tggactaaga aagaaaattg ggctccagaa atggggcgcg tggcgctaat aacacatact 120
tgaaaatgtg gatacagctt tggaaatggg tgataggtag aggctggaag aatttgggag 180
gagcaggcta gaaaaagcct gtattattgt gaaaggagca ttagggtgat tgtgatgagg 240
gcttaacaag acagaaaaga acactaagga aagtctagag tttgttagtg agttgtgtaa 300
agcaggttag gagcagtagt ggtgacagta atgtggacag taaaaggtat tttgatgagg 360
tcttgggatg ggaaaataag agtatcatag tagttagata cgtggaagaa agggcgtatg 420

ctgttgtgtg atgagagttg acataagtat ttggtctgca gttgtgtcta cgcgtcaagg 480 gtgtttgtga aaggcttgag aatgaggtag cggtatcttg gtggaagaaa gtttctaagc 540 tagcaagacc aggtcaagat gctggatggt gatcttctgg gcgctcctac agtgaggttc 600 aggagcaaag ggtatggctg aaatgcacta atttatataa tattatagag taagctagac 660 720 agtgaaatat ttggaaaatt tactagcctg gcctacataa agaatgaata tagtgtttga gatagtggca taagctaacc atttgttata actagactta gtgcgtatat agtaatagga 780 gtctagaggc tgttcatcag gacaacatag agaagatcct gataagcaat tctagatata 840 900 tttaaagcat ctcttcctgt cataggcgct agtagagcag aatgatttca caggatgggc 960 ctgggcacaa cctgtataag cattgctgct caggactgac tcaggactct gtacctgccc aagcotgtat ataatgcaga gtactactat aacactgtog aacgcotogo gcatgcatog 1020 1055 agaagcaaca gcagtattag ctggttacac gttcc

<210> 54 <211> 1108 <212> DNA

<213> Homo sapien

<400> 54 aggatcgatc tctagcagga tccccctacg tcgcatttta cagctgtgag ccataataat tcctttcttc ttttataatt tatccagtct caagtattct gttatagcaa cagtaaaatg gactaatgac aaaattggta ctgagagagc tggagttgtt gctattacaa tacttgaaaa tgtagaacca gcttgtaagt gtataataga ttgtagaggg aagaatttgg gaggagcagg ctagaaaaag cctgtattgc catgaaagga gcattagggt gattctggtg agggcttaac aagacagaaa agaacactaa ggaaagtcta gagtttgtta gtgagttgtg taaagcaggt taggagcagt agtggtgaca gtaatgtgga cagtaaaagg tattttgatg aggtcttggg atgggaaaat aagagtatca tagtagttag atacgtggaa gaaagggcgt atgctgttgt gtgatgagag ttgacataag tatttggtct gcagttgtgt ctacgcgtca agggtgtttg tgaaaggett gagaatgagg tageggtate ttggtggaag aaagttteta agetageaag accaggicaa gatgctggat ggtgatcttc tgggcgctcc tacagtgagg ttcaggagca aagggtatgg ctgaaatgca ctaatttata taatattata gagtaagcta gacagtgaaa tatttggaaa atttactagc ctggcctaca taaagaatga atatagtgtt tgagatagtg gcataagcta accatttgtt ataactagac ttagtgcgta tatagtaata ggagtctaga ggctgttcat caggacaaca tagagaagat cctgataagc aattctagat atatttaaag

60 120

180

240

300

360

420 480

540

600 660

720 780

catctcttcc	tgtcataggc	gctagtagag	cagaatgatt	tcacaggatg	ggcctgggca	960
caacctgtat	aagcattgct	gctcaggact	gactcaggac	tctgtacctg	cccaagcctg	1020
tatataatgo	agagtactac	tataacactg	tcgaacgcct	cgcgcatgca	tcgagaagca	1080
acagcagtat	tagctggtta	cacgttcc				1108
	o sapien					
<400> 55 aagtgacgac	gcatcactat	acggccgcag	tgtgctgcca	attcggctta	ctaatatttg	60
gtttacatat	ttaagtgctc	tgataattgg	gtgtataaaa	aataacaatc	ttcttgaatt	120
aattgacccc	ttcatcatta	ttataattac	cttcttttca	ctttgtatag	cttttgactt	180
aatgtccata	tttgtctata	tataggtata	gctaactctg	ttctcttgat	ttccattatg	240
cataaaatat	cttttctata	cattttttaa	atgtatacgt	gtacttcact	agtagaagtg	300
cgtactctca	tgagtagcat	acaatataag	tagtgtttta	ttcattataa	acactaatgc	360
gatttatgtt	tcagagaata	gaattacata	tagataaggt	ataggactta	actatctagt	420
taattttcgt	ataacatata	tatctaggta	tagttaatag	tagatacatt	atagtatcct	480
ttacttacct	actcttagct	agtactattc	tatataagta	ggcttagacg	ttagatttta	540
tctttatagc	gtcacgtaat	agctatctag	aattctccta	ac atta taa a	tatactatcc	600
tagttaataa	tactaccata	t aa taat a ta	tat aa ataa a	ttataaaggc	aatacctggt	660
acacaccaat	gaaaatattc	caaa				684
<220> <221> miso <222> (28)	feature(283), g or t					
<222> (28)	c_feature 7)(287) c, g or t					
400 55						

gatatogtgc caccaaactc cagootgggc gacagagcaa gactooggtc tcacaaaaag 120 180 ggaaggaagg gtgacaaaga agaatattag agagcactca aataataatt cttgaggaca 240 agttttaaga cagatcggca ttatgaaaaa cagattttgt cancgtngag aagccgctca 300 gggcttcagc ctagatcctg cgctgctcac cacaccaqaa aqccaaccac tqaqatqaqa 360 cctcggccgc qacacqctaa qcc 383 <210> 57 <211> 842 <212> DNA <213> Homo sapien <400> 57 eggacgtatg cegtgtacce acttgttega getegateca etatacquee ceattteetq 60 aatcgctttc gacgccgccg gcaagtacta ttgttggttc actacccgga gcccatcact 120 tgtgggacca acaatgtaac tgtggcacag ttactctqcq attaqqqcaa tqcaqqctaa 180 tattgtaaag gcccaggaaa agtgaaacgg cagcagacag agagtgaatt ccatctgata 240 acagcactga tcatgtattg caccaggtgc tttcaaatta catcatttca agtgtaatct 300 actactataa cctcataagg aaactgagga tcagagaagt ccgagtaacc ttacccaaat 360 aatacacage cagecactga ccatacacca qtctctttga tagcaaagge cagatggett 420 tacactacac caggaactat aactacccta ggagcatatg ccaaggaagg aaatagaaag 480 tcagataatt caagtagogt tgcctaaata ttacacqtqq catqcatqaq qqtctaacqc 540 gctagatgtc tataacacat gcctttctga tgtctctaat gagcaactgc aaaggttagg 600 ggctcttctt ggccctacag ctctcaagtc tggtggcaga gatcttttaa gagagaaaaa 660 ttggaagtcc catgtcttgc tcccacctag cataaacqqq actgacttqq caqtqaqcac 720 ctgaagtagg gtaccttcgg ccgcqacacg ctaaccqaat tctgcagatt catcaactgt 780 cggcgctcga gctgctttaa aggccaattg ccttatgatt cgtttcattc actggcggtt 840

842

```
58
<211>
      710
<212>
      DNA
<213> Homo sapien
<220>
```

ta

<210>

<221> misc_feature <222> (229)..(229)

<400> 58 ccatggacac tccatcactg atacggcgca tgtgctgcaa ttcggcttac tttcttattt 60 acatatatta acaagattgc aattttaagg ccacacttgg catcttggaa tggttcatct 120 taaaaacact tttctqttct ctaqatqttt qtqttatcqt atqcatcaqq tttctcaqqa 180 aactcgtttc ttgcagagtt agacctggag actcacaaag ttggttganc aagcaaaaca 240 actcaattta gcagatcagt gtcatttctt cccattgttg tatggttaca tgcaagaatt 300 agaacccctg agcactgaaa catctacgta aagcttctgg ccagttcagg aaatctgctt 360 aatatttagt aagetgetta cacatttgag etetatggaa teagtgtaaa eteteaaaga 420 aacatctagt tcaattcaac aatttaatga gaaccgatgt aataggcact acactagatg 480 ctagggacte aaggacaage aaaacacaac ctttcccact tggaaagete acagtettag 540 gggagcagct tccctcttgg taggtagaaq qcagtatqta tatatacaat gacqctqcaq 600 ggaaatccct gctccggttt taacttttaa tgtagcatta cttcttctgt gtgtagatga 660 ctaatatgca gtcagctttt aaaagtttta ataaattttg acataagtgt 710

<210> 59 975

<400> 59

DNA <212> <213> Homo sapien

gggcgcagtg tgctggacat tcggcttggg caggtaccat gcaaagagta accctagaga gccaaaggga ctatactaac taccagaaaa aataaactct aaaacaaaag gtggctacta 120 gcaataggga aacttatata atgataaaaa gttaattccc tccaaaaagg aatattacaa 180 attacaaact tatatgcagt taataattat agccccatag ttgcataaag aatacctgac 240 agaactgaaa agaqaaatag aaaaaccagg aataacagct ggaggattca atacttcact 300 ttcaataaag gatacgaata attactcaga acgattacca agaatagtag agttgacaaa 360 aaaataaaaa cgcaatcatt gaaacacacg atgtgtagaa cacaccaacg ttaacaatac 420 gcagcaatcg tatcttcttt ctcaagtgtt catgggaaca tattcttagg ttagaacaac 480 atgctacgct gtaaatcaag cctctaacac atgttaaaag gattgaacat cattatgaag 540 ggtcttttta aaacacaaat gagatcaatt taataaccat aaagaaattt gtggaatatc 600 cacaaatatg tggaaattaa actatacact ccgaaatcaa aagggaaatt agaaaagggt 660 ttgacgataa actgaaagca aaaatacaac attactaaaa catatagtaa cacagctaaa 720

gcagggttta gagggaattt taaagctgta aacatcaata tttaaaaaga aaaatggttc 780
tccaaataaa aaacctgacc tgccacctta agacactgaa aaaagaagag caaactaaat 840
ctaatgtaag gagaaacagg aaataataaa taaaacagga gaaatttctc aaatggataa 900
tataaaagtg acagaaaaaa ttaaccaaac caaaagtcag tcctttaaaa ttgttaacaa 960
aattggcaaa ccttt 975

60

120

180

300

360

420

480

540

600

660

720

780

840

900

960

1020

1080

<210> 60 <211> 1201 <212> DNA <213> Homo sapien <220>

<221> misc_feature
<222> (1123)..(1140)
<223> a, c, g or t

<400> 60

acateetgae teateagaaa gtgatgette teaacgaage aaageaatea ttettttgta aagttcaagt aataatcttc agatgaaaac caaaaaatgc ttataaattt ggtgaataac tcctgaagca cttatgttat taaaagtgtc tttctgatta agactatctc tgaaacagaa aactaagata tootattttg tatotgacat aactotaaat toatcactoo ttaaagaagt cttcctcatg actgatcagc tgaatcaaat aattttcctt ttttctttat tacattttaa ttaatcagct gataaggttt ggacacccag aagaagcaga aagccagtca ctttgcagta attcaatttt ctttattggg gttgcaatgg tcaaggaaat aacatgctcc aaagataaca caaaagtgaa caaaaatggt tootgtootg aagaacttca cotttttgga gactgcatca gatatggcag tgaataacta gtataaatag aagaaaagta gtaaaatacc agtaataaat gcgcttcatt gatacaagca gataaatctt agtgaaactt caaaggaggg cataacatac ttctgacttg agaggaatca ggagaacttg ttgaagaaaa agataatttc agataatctg tgaatggtag ataagatttg aacagataaa tgtaaggaag aaagactttc caagaaagag actcaatgtc aaataagagg gcatggtcat aagggcaagg ctgcacttga ctggactctg gaatatgatg caggtggcat gaggaagaag gtgggcatca tcagctgcag ctgactcagg gaccttgaat gaccatgtgc aagctctggc cctaccactc agacagtgtg gactcactaa gaagtgagtg ggcctggcaa accccagctt tagaacgatg aatggagaaa aagtggaggc aagagggcac ttcaggaggc tgctgatgag gtctgaccta ggttagtggc agtgagggtg gttcacaagg aaggattgta agagacattt ctaagatggc atcatcaggg accctgcaac

			36			
agatggtttc	cggcacaaga	gagagggagg	agccagccag	gtnnnnnnnn	nnnnnnnnn	1140
taagccgaag	tccagcacac	tgcggccgtg	acaagtgatg	gcgagctcga	ccactgactc	1200
a						1201
<210> 61 <211> 693 <212> DNA <213> Homo	sapien					
<400> 61 acttgatata	actttaattt	tcttaaattt	gctaagactc	gttttgtgga	ctaatatacg	60
atctatcctg	ggagaaggtt	ttatgtatgc	ttgaaaagaa	tatttattct	gctgctgttg	120
aattgatgtt	ctatgtgtgt	tatgtccatt	tgctctgagt	gaatgtttcc	ttattgattt	180
tatgtctgga	tgatgtatcc	atttgttgca	agtggcttac	tgatatccca	tactactttt	240
gaaattgctg	tctacttttc	ccatttagat	ctgttaatat	ttgctttatg	tattttaggt	300
gctctgatgt	tcagtgcttg	tatactgaca	gttgttatat	tgtcttaata	atttgatcca	360
tttgttatta	aataatgact	ttctttggct	tttgtgggag	gattgtctta	aagtctattt	420
taactgatat	aaatatacgc	tatctctgct	cttttggtta	tcatttccat	ggaatatett	480
ttctcatccc	ttcacttgtc	agccctattt	tgtgttcctt	gtagggcagc	atattatttg	540
ggttctctga	gttctaacaa	ttcatttacc	caatcctgtg	tctttttggt	ctagacaatt	600
tagtcccttt	tccttttctt	tttataggtt	agacttgttt	tcagtgtcta	cttgcttctg	660
ctattttggt	ctttgtcctt	ttccctgatt	ttc			693
<210> 62 <211> 745 <212> DNA <213> Home	o sapien					
<400> 62 cggccgccag	tgtgctggca	ttegggttte	gageggeege	cgggcaggta	ccatgggttg	60
atttttatcc	ccaagcactt	catctagata	gcaaaacata	tactcttttg	taaaaatgca	120
cattaaatat	ccattgcctc	taaattaatg	cccacgtata	aagtcccaaa	gtaagatgcg	180
ctccttccca	atcaaaattc	tctaaacagg	gaattctcta	aacagggaat	tctctaaaga	240
gactaaaatt	ctctaaaggg	aacagaccac	ctatgagtgt	gaggcagaag	acctcagcaa	300
ccagattgcg	caaacgtcag	cagcatcact	ggatctatta	gattcaaata	taaaataagt	360
attttaaata	aagaaatgaa	agcatggtgc	aagaatatag	aggetaatet	aggtagagta	420

gggacataat acaatttctg caaagcaata acattgaaaa tactataaat ataaattccg

tatgtgtaga ttaaacagct agattagata tagccaaagg aagtacacta ggctgaaggc 540 ggaacagaca totgaccgac acactgcagt acaaagagta caaagacata taaaattatt 600 tttaactgtc aaaatacata gatgatagag taaacacgcc gttaacatat tttcaattgc 660 acctacgggc gcgaccgagc taagccgaat tctgaatatc ttcacatggg gacgacgaca 720 tgaattaagg cccttcgcct atatg 745 <210> 63 <211> 985 <212> DNA <213> Homo sapien <400> 63 tacacaacaa aacagcaaga aacgaacaac aaaagatata ccacgacata actcctgttg 60 ctttttcgat tcatggtcga gcggtcgcca gtgttatgtg tacctgcgta attaaggctt 120 actaaaggct ctagacagtg taataaggcc agaaaaataa aagatttaat aagttggaga 180 qaaaaaaaqa ctatcattat ttqcaqatqc atqattqtat aatataaata taccaaaqqt 240 cgagaaacta tggtaagaat atttaatcaa ttcatacttt tattattaga tatagtaatt 300 tttaqcaaaa aqcatctatt tqccacctaq aaataatccc acataaaqtt aaqacaaqaa 360 ctttatacca acaaatqata aaattqttqt atattaaaqc aqacttataa taaatqqaqa 420 gatactetta tototaaaga caggacaatt agtteaacge caaactgget tatgaattta 480 atacaattcc aatggaaact acatttcttt agttaagctg atattatgat ttgaaatttt 540 atttqaaaat ctcqtqqqca qtqacaqcta aaqcactcac caaqaaatat tatcaaqttt 600 tattacaaag ctagagtaat ttgtatagaa cccctaaaca gaaccaacct atacagaaac 660 ttgtttacat ataaatactg tgtatttaga gagaaaagac aggactttag taatttagtg 720 ctgagacaat gtgttatcca taaqqqqqca acaataqtqa taqaactctt tatctcacaq 780 catgctttag aacaggagag aaagaaagaa atgtgtaaaa cttaacaatt gtttatggcc 840 taatatacag aatgatgtcc taaacaaaat accaaaaagt aattatatta agaactcttg 900 ggggtaggga ggaaatgggg atatgtagtt ccaaggctgc tacgttgcaa ttagtagaac 960 tgaactaagt ttagaaattt aatgt 985

<210> 64 <211> 707

<212> DNA

<213> Homo sapien

<220>

<221>	mis	5C_1	e	atur	. (
<222>	(32	20).		(638	3)
<223>	a.	c.	q	or	1

<400> acagttcaat cacggttttg acaaatgtat atacctgtgt aaccaccacg attaaaatac acqagctctt ctgtcaattt cctaataaac gtccccagca cccctttggc aggtcaaatg tcccccgcca tctcagcccc aggetttctg tcattatagt ttgcaatttt ctagaaattc caatataaat gaaagccata ggagcataat agtacagtag tacatatgaa ataggtattc acttgtatct ggctttttta tttccttgga gacagggtct tgctgtgtca cccaggctag acaacggaaa agtcaagaag ccacgcccag gcagacgaac caaaaga <210> DNA <212> <213> Homo sapien <400> 65 aactacttgg cactggtctc tagatctgct cgagcggcgc agtgttgatg gatatctgcg

<400> 65
aactacttgg cactggtctc tagatctgct cgagcggcgc agtgttgatg gatatctggg
aattcggctg ggcaggtaca ttaaaggaga aagatctcaa ataaaaaacc taactatata
cctcaagaaa cagaaaaatt aaaaaattaa ttaaaaaaaa aattagcaga aggaagaaaa
tagtaaaggt aagatcagaa aaaaatgga ctagacgaat ggaacgacac aattttaaca
aactgggaaa aaactgggat tggttttct tgaaaaggga taaacaaaat caacaaaccc
ttagctgaac taagaaaaaa aagggaactc aaaatcagaa atgaaaggga agatattaca
actgaaccta caattaaaaa gaatcataaa tgaatattat gaataattac atataatgaa
ttagacaact tagaagaaat ggagagttc ctaacaatat acgacctacc taaaacaaga
agtaacagaa agcctgaaca aaccaatgac aaattaggat attgaaggaa taataaaaa
actcccaaca aagtcgagcc caggacaaga tggcttcata agtttattct aacaaacatt
taaaagaatta ataacaatcc taaaaacactc taaaaagaga aagaagaggg aacacttcca

aactcatttt aagaagccca ttaaccacca aataccaaca ccagacaaaa ccaccacaag 720 aaaataaaac tagaggccaa tttccctgat aaatgaatat acaaaaatct tc 772 <210> 66 <211> 1248 <212> DNA <213> Homo sapien <400> 66 ggctgggcag gtacattaaa ggagaaagat ctcaaataaa aaacctaact atatacctca 60 agaaacagaa aaattaaaaa attaattaaa aaaaaaatta gcagaaggaa gaaaataqta 120 aaggtaagat cagaaaaaaa atggactaga cgaatggaac gacacaattt taacaaactg 180 qqaaaaaact ggagttggtt tttcttgaaa agggataaac aaaatcaaca aacccttagc 240 tgaactaaga aaaaaaggg aactcaaaat cagaaatgaa agggaagata ttacaactga 300 acctacaatt aaaaagaatc ataaatgaat attatgaata attacatata atgaattaga 360 caacttagaa gaaatggaga agttcctaac aatatacgac ctacctaaaa caagaagtaa 420 cagaaaacct gaacaaacca ataacaagtc atgagactgc agtcagaata aaaaaactcc 480 cagtaaagaa aagcccagga caagatggct tcataagttt attctaacaa acatttaaag 540 aagaactaat accaatccta ctcaaactct tccaaaaaat agaggaggag ggaatacttc 600 caaactcatt ttacaaggcc agtattaccc tgataccaaa accagataaa gacacatcaa 660 aaataattaa aaaataaaac tacaggeeta tateeetgat gaataetgat gcaaaaatee 720 tcaacaaaat qctagcaaac cacattcaac aatacattaa aaaagatcat tcatcatgac 780 caagtaggat atgttcctgg gatgcaagga tggttcaaca tatgcaaatc aatccaagtg 840 atacaacata tcagcagaat gaaggacaaa aaacatatga tcatttcaat tgatactgaa 900 aaagcatttg ataacaattc aacatctctt catgataaaa accctaaaaa atctggatat 960 agaaggaaca taaccttgac ataatgaaag ccatattgaa agacccacag ctagtgccat 1020 acttaactag ggaacaacat tgacagcett teetetaaga tetggeaaca tgacaaagat 1080 ctccatttca ccactgttct tccgcatagc actgggaagt cctagggtag agcactcaga 1140 tacggagaac gaattacagg acaccaaatg gaaaataaga agacacaata tcctcgtctg 1200 1248 acatgacctc atattgggaa aacctgaaga tccacaagaa ctcgactg

<210> 67 <211> 656

<211> 656 <212> DNA

<213> Homo sapien

<220>

<221> misc feature <222> (405)..(405) <223> a, c, g or t <400> 67 gtacaagctt ttttttttt ttttttgggg aaataagccc ttaatttaaa taaaaaacca 60 acagtccagg gtaaaaataa aaaagggtta aatatcaatt tctggaaaat ctcacttttt 120 tttaaaaaga aattaaaacg ggccagcaag aagtctcaaa aaagattcag ctttactata 180 240 atgggcccgt ggggatgaaa atagtgctat taagaagata gtataaatat ccgaggccga 300 qqcccaqqqa qqqaqaaaaq aaagaaaagt gggggggagg caacaaaccc tccgagggta gtttattata tccgcggata tctccaacat tcctcccggg cgggcctaaa aacgagttat 360 420 ttaaqtcctt aqtqqqqaa acctttccag gcagagaact ctgcnggcgc gggaaaccca 480 qaaqcctqtq cttcttaaga qggggcccaa attcgcgccc ataataaggg gaggtcggtt 540 attaacacat ctcaccgggg gcggggcggt tttaacaacc cgtcggtgga cgtggcggag 600 656 aaacccgtgg ggcggttttc cccaacatta aatcgcgctt gggagagaca tcacct <210> 68 <211> 694 <212> DNA <213> Homo sapien <400> 68 acagaaagtg gttatccttg gaaggggata gtgtctaaaa gcggggcagg tagaagaatg 60 gettttgtgt getggtaate ettetattte ttgaaceggg tggcaattat atttttggtg 120 ctgctttgtg aacattcacc aaaccaaact ctacggttac gtatttttca gtatgtgcaa 180 cttacttcaa tcaaaataca atcactaccc ttcagattat aactggatac aaagaaacac 240 tgagcacaag gataacttta ataaatttaa aaactatcac cagggttttt agctaattag 300 aacacttttc agcttcaagt aacagcaaaa tcaacttaac tggcttaatc tagaacagct 360 aacgaaaggg cttcacaata atatgaaatt ccagggccaa aaacaggagt tgactaattc 420 acggtccaac aaaatctagc aacactggtt ctttcttttt ccttttttt ttttttggga 480 cattaagtgt cctcgcttgt gtgcgcccag gcttgatgtt agcagatttt ttgcagattt 540 teegeteacg cttgggggee gtttggaage ttgtttttag agggeeaata teggetttat 600 agtgattggt ttacattcat tgccgcgtta cacgtcgtac tggaaacctg ttccattacg 660

ctctccccc cgcaaaaaag gagaggagaa agca

<210> 69 <211> 487 <212> DNA <213> Homo sapien <400> 69 qtaactaacc tgccccatgg gcacatgtac ccttaaactt aaagtggtaa taaaaaaaaa 60 aggactgaaa aaaaaaagaa cagctgccta atcgtctgga agctcctgta atcccaagat 120 qtqaattaca qaqttctctq aqttqctqaq aaaqaacatc cgagttttca gcccagtcag 180 240 cgttcagata attctttgtg aagttaggag tgaggactca ttaattgcct ttaggcagaa qqqctqtaac cctqqqacta aqqqtqqatc tqaaaqqaca acccctaca acagagacta 300 aaatqaqacc tttacaagga gcaattctaa ttccaccagc ataattaaca gtcctgccaa 360 aacaaaatac aacacttctt gaaaaagttt aacagtgatc cagagtcctg tataaccact 420 catctacaat gtcaaaccta actgaattag tctgctccag gctgccatga caaagtacct 480 487 cggccaa <210> 70 <211> 594 <212> DNA <213> Homo sapien <400> 70 acctgatttt aaaattatat gctcaaatgt atattgcgta taaaatgcta acagagaatt 60 aagtgtttat agaacttgat gaacgtttaa ctgtagcttc caacttaaag tatacctgcc 120 acaagaacga aagtaataat ctcacctccc tttttgtgta gagactgaat tctaattagt 180 tgtgttaata gtatttgctg aatacctttc aattcctaaa actggggtca aagtagtcaa 240 300 cattqcaqtt aattattttt qaaqaqqata tqaactattc tgttatttaa gatattttaa cctagatacc attatgagtt aggatgcata ccatgatata acaatttacc tattaactgt 360 tgacaatctt gcagccaatt aagtttttta tagaaccagt gttcttaggt atgtttgttg 420 480 agcettetac ttttttecc tttgatgtgg ggaatagcat caagcagcaa gaaaagagtg ttgatcgatt tctctcttt tctctctct tctctgtatc cttgccgttt aaaatatgca 540 594 ctttccaact agtatttggg ccgttaggga gttagtatct ttgtaaagat taag

<210> 71 <211> 632

<212> DNA

<213> Homo sapien

<400> 71 60 acctgatttt aaaattatat gctcaaatgt atattgcgta taaaatgcta acagagaatt aggtgtttat agaacttgat gaacgtttaa ctgtagcttc caacttaaag tatacctgcc 120 acaaqaacga aagtaataat ctcacctccc tttttgtgta gagactgaat tctaattagt 180 tqtqttaata qtatttqctq aatacctttc aattcctaaa actqqqqtca aagtagtcaa 240 cattgcagtt aattattttt gaagaggata tgaactattc tgttatttaa gatattttaa 300 cctaaatacc attatqaqtt aaaatgcata ccatgatata acaatttacc tattaactgt 360 tgacaatctt gcagccaatt aagtttttta aagaaccagt gttcttaggt atgtttgttg 420 480 agcettetae tttttteee tttgatgtgg ggaatageat caagcageaa gaaaagagtg ttgatcgatt tctctctct tctctctct tctctgtatc cttgccgttt aaaatatgca 540 600 ctttccaact agtatttggg ccgttaggga gttagtatct ttgtaaagat taagtcagca 632 gaggaaggtg ggcaaataat atttttgata aa 72 <210> <211> 989 <212> DNA <213> Homo sapien <400> 72 tecgaggete cateactaat acggegeagt gtgttgcatt cgtttggegg ggtactggag 60 tattottcat aggagtetet cqtaatettt ttaettetge qteeteagtt tqtaatqtet 120 cattlctgat ttgtgttact ctactttaga cttctatttt cttacttatt gaaagaattt 180 qtttaaattt tttattttt aaaaaaactc ttatttcatt gattatttct ttattatatt 240 ttaatttatt ctctatttcq atttatqttt tctqtaatct acqaccttcc ttttqctaac 300 360 tqtaatctaq gaccttcctt ttactaactt tggatttagt ttagctattc ttattatcta qttctttqaq atacaaaatt atctccaatt cattqattqq qqatcttctt ttaaaacata 420 caaacagttt actgccacag tttatggtgt gttgtcgttt tcatttgtca cctgctgtta 480 aaatactgtt aaatagtgat tetetgtgac teatcaagat tgttcaagag tatattgett 540 aatttqccac atctttqtqa attttctaqt tcagagtttt ctagtccagc atttctagtt 600 tcactgattc attagaaaat atacgtgggt tttctcatca gtattcttct tgaattcgtt 660 aaaacattga ttcgtgtcct caatatgtgt tctgtcttgg agactgtttt atgtgcacct 720 gagaagaatg tgtataatta acataagggt ggaatattgt ttatatatct attagagtca 780 atteactttt agtattgtte aagteettta ttteettatt attttettt etggttgate 840

tatttattat tgaaaaagag tattgtaatc tcctcctatt atttttttaa tctaattctt

960 cctccagttc tatcaatgtt tgccttaatg tatttgggtg ctctgctgtt tggtgcatat 989 agacttataa gtgttgtacc tgcccagcc <210> 73 795 <211> <212> DNA <213> Homo sapien <400> 73 60 tqtqctqqcq tcqqqttaac caqaactatc ctttggtgct tactgagtta ttttccgaac atgggagttt ttttctcaac tctttattct tccccagtgc atatgaggaa tacattaaca 120 gttccacgtc gtccatcaat tacaacaaag tggctattgt gtagtaaaat gtgtgcttcc 180 aaataatgtc tttatcttgg agggtgagat aagagtacgc aatgtaggga attcttgacc 240 aactttttcc aagtatatct tggctcgtcc catcccagga atagtgagtt gttttattac 300 tttgtttatc aacatctcaa ttccagtgaa actattcttg ctttccaaga tattgttgaa 360 tettettet geeteaatae etaqtetate etteaeteat aagtitteet aataeetgaa 420 ttacatataa cqaaatgtat ttgtatttgt atcaagcacc agttggcatt tctgtgtgtc 480 540 tactqactcc ttaaatcctt tgaggtagcc actattatag ttcgcccaaa attctagatg tattacaact gtaggcgcag taaggtctat ggtaaggttg gatccttagc ctgactctct 600 gcagtggcct atagctactc ctaacatctc tacttatcca taagctttta gagctctatt 660 ttgatectet ttgtaagaat cecacaagee ttataggete aggeatetge teteteaact 720 780 caccagcatt aatttcagac acttctttgg aaatttcatt gtgcacttcc cttgttattt 795 ctctgctatg gttgt <210> 74 <211> 1266 <212> DNA <213> Homo sapien <400> 74 cacatetett ettgtaatag etttaeetga etttteagaa taagtgetga teteatagaa 60 tttgttggaa getgeteest etettagttt tttetttett tetttttt ttttgggaaa 120 aagtttgtga aaaggattag tgttaattct atttccagtc tctgtgtaaa atacttcatt 180 aaggccatcc atgatcaggg atgatatcgt gtggatagtg tagtaaggag gggaaattct 240 tacatggctg attcaatcac ctcacggggg atactttcgg tacaggtgtc taaattccta 300 atgtgagttc agtcttgata ggttgtattt ctaataattt atccattttt gctaggttat 360 ttattttgtt tgcattttac aattettagt attetattac ttgtccctag aatgctaaca 420 caatactgat gttgcgaaca ttggtccttt aaaaagaacg agaagacaaa tttcggagat 480 caatteegga aatttttgag acaaagaaag eetaaagaaa atgeettttt gggeaaaaag 540 tgtagcaact aggtttttag agtagtatat gagaatcata tagagaagac atttctgaaa 600 aaaaaqatqa aaaqcctgtc ccatattagg aaataatata tttaatcagt tagaatatgg 660 aaatatggaa ttatttgaac agcetttttt gtaaagcatt geteetaate aagtaataaa 720 tctaatgggg gctctgtggg tatacctgta aagctaatct ttctctttga attttatgga 780 ataaaagtta ataatttcat taagttggag gttgggtata caaatgaaaa taacctggcc 840 900 agcctagtat ctggggtttc caacctagat atgatattct taatgaagaa aaaatataca tatataatat ttgttacttc acatttcctc ttaaatatta gaaacattgc ctttcaactt 960 atcaacttat aatatttaca tgacgacccc cttccacttt gttcacttta ataactttaa 1020 taacatcatc attatggctg taaagtgatg ggagatgatt atttgcatga cgttacaaag 1080 cccttttaaa actagtaaaa accatatgaa caatataaaa ccaaaccatc tattaaaagt 1140 tcacgggttc acagcttatc ttagatttct cttcttaagc aacagagttc taaagtttgg 1200 cactattatc ttggtaggag cagtttgtgt aagacgattc cagcacactg cgccgtatca 1260 1266 tgatga

75 <210> 720 <212> DNA

<213> Homo sapien

<400> 75 caaqaaacaa caqcaaacaq agaagcagga gctgcccaaa caaagcaagg aatcagtgac tgaccetcag tgaaaaagca atatgtgage teteggeata caagaattaa acaatcaate 120 agttttcaag gcaacactcc agtggtctcc acaagtaaca caaaaatagt aaccttcagt 240 aattaaaqaa cactttaact aataggtgat tgataataat cttaaataca gtcaaaccat acattettee aacteagaaa ttataettae tgaactaaaa taatteaett caaceteet ctgcacaaca gtaatatcat gcatagtaag acgggataac tacattctgg tgcagcctcg aaatqatatg ggttatttga cataactacc acaggagggc agcaacagat acgtaaaaac aacatgacac tgacacacga aaccaaatga ctgtcctagc aaatggacta acagaatata ttatccttcg gaaagaacca caatctaagg taattgactg gttgttcaag gagggtaact acaggcaagc agcaaggtgg ttagagacat gcttactcag aagatactaa ctaagcagac

60

180

300

360 420

480

aaatgttttc ccaaatatgc ttgagaaaag agacccaaat tatccaggtt ttggaatgct 660 cagaataata ccaaaaaatg atccaaccca ataataagaa ctaccccaat gcttattagc 720 <210> 76 <211> 926 <212> DNA <213> Homo sapien <220> <221> misc_feature <222> (703)..(703) <223> a, c, g or t <400> 76 agetggtega getegeteet tgtaeggeeg eegatgtget ggeattegge tttegagegg 60 cgcccgggca ggtactgatg aagatgtttt ataattgcat ttatggactt aaatggctaa 120 aacaacatca tagattottt catatatgtg ttgtttgcga aactgatgct tcactcggaa 180 ttaacacaca ggaaaaggat catactattt aagagaacac ttaagaaatt tttgcttagt 240 agagatcaca gtggagaaaa ttatggagga atcaagaatt tggattagaa cataatacgt 300 gaactgtgaa ataggtette acaaagaatt tetataceta atettgtttt cacaaaaagt 360 qaqaaaqtag agaattocta gaagacttgt tgtcttaact gtttaataat gagagccaga 420 gacatttgtg agaaatcccc ttggagaaac attaaggttg ttcctaaatt tgtggtccaa 480 540 agaaqaatat atgagaaaca agttggtcac aggttgacaa gagattctga atggtaatgg tgtaaataag aaatataact aagttgtcaa tcaagaggaa ttgagaaagt ttgaacccaa 600 atatataata agccaacgcc ttccttcaag tgtagctgtc tgtgaatcac actgctggag 660 aaattottgt ttgcaagttt ttottaaggt gaagetotog tgnottcaac cotagcaatc 720 cqaaaqqqct ttaggagaaa ttcacataag aagagatttt tgagaaacta actaaaacca 780 agccaactgg ctaagcaaca caaaaggggg caaaatttcg caggatttag cgatttcctc 840 900 ttttaaaaaa aaagtgottt ototttgatt totgagaaaa agtattoott otttttttt

926

tttttttttq ctatttqctt ttcagt

<210> 77 <211> 1078 <212> DNA <213> Homo sapien

⁻²²⁰⁵ <221> misc_feature <222> (6)..(25) <223> a, c, g or t

<400> 77 60 qqcttnnnnn nnnnnnnnn nnnnnacctc tqqtaqaatt caqctgtaaa tccatctggt 120 cctgggcttt ttttggttgg taggctattt attaaggcct caatttetta tcacaaatgt qtqaatttqa teetqteate atqatqetag etggttatte agagecaata ggageaacca 180 tggcccaggt aacacagtgt caagaggttc ctgagaaagt gcacgcatgg cagtcagagt 240 atagtttggt ttcatatatt ttaggaaggc aagagttatg ggtaaacaca ctggtttcgc 300 360 cccaaaaggt ggggtatctt gaaaggggag aaataatgag aaaggagatt tacgtttaac 420 ctaaccactt actcatattc ttgctgaaag ataaattatt ctgaaacttt ctcttaattg 480 cactccatct gtaaacatat tttggcatag ttaaactagc aaatttctta aacatgttta tttactaaag ttgaatagca acaatttttc ccctttaaaa acataaatac tattttgtta 540 600 tatgagttat tttttctcat gctctcggct ccaggtttga gtttcttaaa ttttgaaaac actatgtttg tttcaaatcc ctgttttatt tctttcctga aacacatgcc taccttcttc 660 720 aataagetea gteacattga teattgaget etetaacate atttacaact aggaatttet 780 caagetqqet qtttqqactq qttageteec atattataag taactateat caetettgea 840 attatttcaa gttttgtttt cccaccaaac tgaaagcctc ataagggcag gatcaagacg tttttgttat tgttgtcttt tatatccaaa ctgtctttgt tttctttgat tgtatgatta 900 qqatcatttt atqctqttqa cttccattqg ttggcctcta ttattgatta acaaccaatg 960 attagctaag aatttaaatt aaacaataaa ttccccaaat tcttgcttca ccatgcttgt 1020 acctgeccaa geegaateea geacactgge geegttacaa gtgageegag etegacea 1078

<210> 78 <211> 1093

<212> DNA

<213> Homo sapien

<400> 78
ataqtatggg coctgcgctt ataattctgc cgagcggcg cagtggttga tggagtatcc
tgccagaata tcggcttact ttcaatgtct atactatttt tttaaaaaaa gtctcaaagc
ccatgaccct ccgtttccac gtgtaagaaa ttaaagagag ccaaccaaag accatggtag
gcgaagaaac caaagaaaag tacattcaat gaaacaaaaa aaattaaaaa atcaatagag
aaaattaatg aaactaagat ctgattcttt gagaagatta ataaaattga tgaatcgcta
gccaggctgg tcaggaggaa aaaaaaaaa aaagggagag aaaattccaa tatttcccaa
ttatttagag aattgaaggg ttaggaaaca ttcactatag agaatttcct gccagattgt

60

120

180

240

300

ttaacacatc tttacaatag gaataaccta tcttagtgat cttaaccttt attattccaa ccaccatttg tgacaacctt tacaccaaaa tgtgaaccat tatttcattt acaaagatta caaacttatt caattgcctc aattataaaa attaaattag attaacacaa cattagcttt catqtqtctc ataattttta taaattgggc attgattagt taaagaaacc ttttccacaa agcaacaatt ttaaccccag tatttgctct tcactggaaa tttctgctaa tctacttaag taaagaaaat aagtatacat atttctacac aaattctgtt caccaaaggt gaaaaggagg aaatgottot caagtotatt ttatgaggoo agtatacott gatacotaat accaaataaa cattttacaa qaaaaatgac tgagccaatg actcatgaga ctatagatgc taaatatgct taacaataat gttaagaaat caaagttcat agtggaatta tataaccagg aatgcaaggt tgttttaaaa tattgaaaat ttggctcatg taaattatat taccagaact acaaagaaaa actatggaag catatcaaca aatatagaat cacacaaagt ccaatatcca ttcttcataa aaattttcag tgt

<210> 79 <211> 1031 <212> DNA

<213> Homo sapien

<400> 79
actagtttta gctttactcc gaagcttgtg aaactctctg gcaccttgtt ttaacaccag
tttaattatt gggctccttt taaacaaagg agtctgcaaa ttttagataa cataccttgt
tagaacaaaa attgatggaa gatgaacatc aatactttga cattcattac tacagtctgg
tttaagccaac tgtacctgtt ggacattaca tattctctag acgcgttctt cacttcagac
cttcctatat tatttgttat aacttgtaag aattttgtgg ggtttatttt catatcacat
tcgtttttac aggcttaagg tctttttagg gactcttggt aataactgct tagagcaaag
agggtgcagg ctaacaattt gttgagtaga tgtatgttac ctcccggtat cgcctttcta
ccttactgcc atttaatccc tcagtaataa acccctgaga agatagagta caacgcttca
tttgaatagt tgagatatag cctgaagcc caggggacta ttttgtctgt aaaacacca
gcaagtgct agaactgag tatgcactag tttccgtgac tcgtatagcc gcatgctgta
ttgtaggtag agaatacgtg gaaagatctg tagcataatag agctaaggat ttgtcatagt
gataggtatt acacctca agaaactgg gggaattgt cctcataacg tcatgatcct
gtggaattct tggcctttca tctgactct tcaccatt tacatgagat gccggcagag

taaaatcatc	agaatactaa	aacacacaaa	atcacaacta	ctcttagaaa	cagattctca	900
tataaaaaac	ctgatctttt	tatcatttgt	cctccgtgtc	ttcctcagcc	tttatttgta	960
cctggcccgg	gcggccgcgt	cgtaagccga	attcgtgcag	atatcgcatc	ataacggcgc	1020
ggctcagatg	a					1031
	o sapien					
<400> 80 aaatattcgc	aactaaaaaa	gaaattgtcc	aatacaactg	ctggggtctc	tgaaaacctt	60
tgggcctttt	ggagctagat	gctgtataaa	cttatccggc	tcattctcat	ttagcatagg	120
tttatagcaa	catatctgat	tggctcagct	gggcttgggg	ctcagtgcta	gcctgcaata	180
ttagtggaca	atgtgttcaa	atggagctgc	agaagttatc	tattgttttc	ttcaatattg	240
cagcttagaa	gttgccagaa	tattattcat	tttgttattt	gtttcctctt	tcttgtattg	300
agtatgcctg	gattttttgt	atgcttggat	tttttggttt	atatattagc	caatcacacg	360
tcctccaaaa	tgggaatgtt	catgatcatt	taaagcaggc	aaaaacctga	catgtggact	420
ttaagaaaaa	tttactcaaa	ctttcaaaat	cttgtgtttc	tttgccccta	aacatgggga	480
ttataacagt	cctacctcat	aaagttttca	tttgggatta	aatgagataa	tgcatgcaaa	540
gtactcggcg	gaccacgcta	agcgaatcag	acactggcgc	gtaatatg		588
<210> 81 <211> 108 <212> DNA <213> Hom						
<222> (24	c_feature 8)(248) c, g or t					
<400> 81 ggatgataco	agtatgcctg	gcttctaatg	ctgctcagcg	gcccagtgtg	atgagttctg	6
cataatcggc	: tgggcaggta	cattctgggc	agagttatta	aatgagacat	attcagagaa	12
gaaagatett	taatgtgttt	tctagacacg	cgtatgtaaa	atgtgagtca	cggttagagg	18
tctctaaaga	gaatgtggtg	tgtctcctct	atgtgtaaca	gtttataact	ttgactactt	24
				202022222	0033300003	3.0

360 accatatgca tgtgagttat cctgtaacac aagatgtgta aaccacatac tggatattat 420 ctqcatctqt cccacqactt ggcatattcg tacttactca tggtgtgaag ggagacctct 480 aggaatttta cctcacagtc tgaagccaag gcgttcatga gaagatttgc caaaaaattt 540 ttaggatctt tttgtaaata ctttcactgg agtcatcaat tatgatacct ccatagaaaa tattcagtca aaaatgattg ttgccttact ttataagaaa gagacaaatt tgtgtctaat 600 atatttatca ggctcaataa aactaaggat ggtttctaaa caaataaatg taggaataca 660 gttgaagcta ggtatttgca ataacattat ttattaaaca tattgagatc ataatattaa 720 gatattaaga acaaatgtgc actgaagaat gacctgccac caaaaatcta actacaacat 780 gaattaacct tgaacaattt aattttcttt tttgttttta aatttaaaac gaaataaaga 840 tggggtcttg ttatgttgcc cagtgtgttc ttgaaactcc tggtttcaag ccatcctctc 900 cacattggcc toccaaatac tgggattaca gacatgagcc accatgcccc aattttaatt 960 ttcaqttaca gaaatttgaa tgcacattat ggagaaaacc gtacctcgcc gcgaccacgc 1020 1080 taaqccqaat tccaqcacat qqcqccgtaa tagtgatgtg gctcgacaag ctggttcgcc 1085 ctctt

<210> 82 837

DNA <213> Homo sapien

<400> 82 taacctcaag cctccgcaag taagctggaa actataaggc aacctgacac ctgcgcccag cctaaggtct tgtacttttt agataagaag aatggggctt tcaaccaatg ttgtgccaag 120 180 quatogtect egattetegt tgaccategt agaateegea ecageaegte aageegteae 240 tataagctag ctgggagatt accacggcaa tgagcctctt gtggaccggt ccgaatttaa 300 totttotaaa atttaatgca gtttaagttg aaacaaggaa cootttgcto tooottaatg 360 cctttgcttt ccgctctttg gtagctcagt tcctacagtt gtttgtctgc agctaatttt cctccccgac tgaaaagaac tttcttcggc cctcaaaggt aaggaagaac aagagcacac 420 aagctgctta ttattctgcc caaatgactc catccagaat acagggagag aattctattt 480 ttttttttt taatttgaga acagggttct tcacttcttg ttcacccagc gcttggagtt 540 gcaggtgggt gttgattcat tggttctata gttgcagcct tcttaacttc ctgtgttata geogaattte ttgcagaatt attecatete acaettggeg ggegegetet egagecattg 660 tcattcttag aaggggcccg aattctcggc ccttatatag tgtgaggctc gctatttaca

60

600

attetecact tggcccgctg	cgctgttata	caacggttcg	agtgacgtgg	gaaaaaccct	780
gtggcgttta ccacaacttt	aattcgccct	ttgcaagcaa	aattccccct	tttttgg	837
<210> 83 <211> 1156 <212> DNA <213> Homo sapien					
<400> 83 aaaagaccac cagagcacga	caaaaacaca	ggggtgttca	tcatatogca	ctaggttcac	60
taatgctgct cgagcggccg					120
taacactttc catgctattt					180
					240
gcaaatacta tacaaaaatg					300
catataggta ggaatatatc					
aaaatgaggg tatcccaaat					360
agcttctgaa aagatttcca					420
gcatagatga aaagcttata	gtgactgata	acaaataatg	gaagttggct	aattcttttg	480
cttagttact atcctatcga	aagaagaagg	ccaaaagaaa	tgctaaaagt	gtatataaaa	540
ggtaaggctc tcaggtcaaa	gttgggtttg	cttctttatc	cagagctatc	ccatgctgaa	600
gtccaggcat aaagaatgca	tttctttgtc	cttatttgtt	aatggggctc	ctccctggag	660
tcattaatct agctaaataa	ataaactaaa	tttgaaaaga	ccacttcatg	aaaccggaaa	720
gtcaagtctc caaaatacac	cttttggggc	atttggctgg	ctgttctgaa	acgtttccgt	780
cacaaatttt catcttatta	aaggaaattt	cctggaaatt	atttacaatc	gaagagagaa	840
cctggatcat aaacaagcct	caattattga	ccattttgcc	ttaaccaggc	tgtctaccta	900
cacctttctt tgcttaggat	aaatgggagc	ctttcaaaga	atagatcata	attatttaac	960
aagttactgt gtgagtgtga	tgaagtetee	tgtcctgtga	taaaattctt	ctctggttgc	1020
atgtaactac cctggggaaa					1080
ctttaggcag ataagggaaa					1140
gcacaactgg cggccg		3	3 3		1156
geacaacegg eggeeg					
<210> 84 <211> 918 <212> DNA <213> Homo sapien					
<400> 84 gtacaagttg gtcgagctgc	ctcactatac	ggccgcagtg	tgctggcaat	teggetggee	60

120 gaggtggaga atcacttgaa cctgggaggt ggaggtttgt gtagagccaa gaatcgcgcc 180 aaattgccca gtatgatggg attgccctta acaattttcc caaagccact gcctcctaag 240 aaaaaaagcc tattattaat ttttaaagaa aaggtcctgc ttatagttct tcttccattg 300 360 ttattcccac agaatcttta tgccaagtaa actttattaa ttactctcca atatttactt accaacttta ctcattggct taagaactta aacagcctcc tcatttgtgc aaaggtgctt 420 taaattgtga cgcctaatta tccctccttc tttgggcaac caaccctcca caatttctta 480 aattaacatt cattagggtt aaacggggcg ttggtgaccc actaacttgt aatttggagg 540 geagetggcc ctcaaatttt cccccaacaa aaaatacagg gaattaaaaa agaaattccc 600 660 cattatttcc cttttgggat taagtatgtt aacttaatga ttacttaaca attcttgatc 720 cacttattat accatttaac atttctcatt tttactatat gcctgtgctc cttttctccc 780 aaaaacccaa ccccaagagg agcttttaaa ctccccagtc ccttgatctt gaaccctgtg 840 aggggaacct caacaattct ttggtccccc ttacacaggg agctagaatc gagctttaaa ttgcttcagg acagtacctg cccaaccgaa ttgcagcaca ctgcgccgta ttcagctgat 900 gcagctcgta tcactgga 918 <210> 85 1210

<211> DNA

Homo sapien

<400> 85 tecagtgata egagetgeat eagetgaata eggegeagtg tgetgeaatt eggttgggea ggtactgtcc tgaagcaatt taaagctcga ttctagctcc ctgtgtaagg gggaccaaag aattgttgag gttcccctca cagggttcaa gatcaaggga ctggggagtt taaaagctcc tcttqqqqtt qqqtttttqq qaqaaaaqqa qcacaqqcat ataqtaaaaa tgagaaatgt taaatggtat aataagtgga tcaagaattg ttaagtaatc attaagttaa catacttaat cccaaaaqqq aaataatqqq qaatttcttt tttaattccc tgtatttttt gttgggggaa aatttgaggg ccagctgccc tccaaattac aagttagtgg gtcaccaacg ccccgtttaa ccctaatgaa tgttaattta agaaattgtg gagggttggt tgcccaaaga aggagggata attaggcgtc acaatttaaa gcacctttgc acaaatgagg aggctgttta agttcttaag ccaatgagta aagttggtaa gtaaatattg gagagtaatt aataaagttt acttggcata aagattotgt gggaataaca atggaagaag aactataagc aggacotttt otttaaaaat

60 120

180

240

300

360

420

480 540

600

720 taataatagg cttttttct taggaggcag tggctttggg aaaattgtta agggcaatcc catcatactg ggcaattttt ttttttttt ttgagacaga gttttgctct ttgttgccca 780 cagcttgaga gtgccagcgg cgcgattctt ggctctacac aaacctccac ctcccaggtt 840 900 caaqtgattc tccagcctca gcctcctgag tagctggtac tacaggcgcg cgccaccagg 960 tccagctaat tttttttgt ttttgttttt tgtagagatg gggttttacc gtgttggccg ggctggtctc gggctcctgg cctcaggtgg tccacctgcc tcagcctccc aaagtgctgg 1020 gattgcagga gtgacgtacc gcacccggcc aatttttgta tttttttagt ggagacaggg 1080 ttttgctatg ttggccgggt tggtctcggg ctcctgacca caggtgatcc acccgcctcg 1140 gcctcccaaa gtgctgggat tgcaggcatg agccactgca cccggccatc tatttcttaa 1200 1210 aaaaaaaaa

60

120

180

240

300

360

420

480

540

600

660

720

780

840

900

960

<210> 86 <211> 1106

:212> DNA :213> Homo sapien

<400> 86 actgaaaaga aqtgaactct caaqccaatg aaaagacata aaggagactt aaatgaataa cactaagtga aagaaggccc tttggaaatg gtacatactg gattattccc actatattat attectgaaa acaccagcat tttttttgcc tacaagttta ttgtgccttt ctcttccgtc cctcccttac cacttctcca ttcacatctg gagacaataa cccatcttct cgctatcagg ggttttctca gaattctggt gcttaagttt ttcagatatt tacatttttg aactcatttt tgtgtaattc tttaggcatg acttcaggat aggagaaaaa taggggccta ttatttttta tgacatgtct tcaggaaatg aaagtttcta aatttggtgt atttttaatg cgatttaaat aaattttcta taggeggeat aataccatct actaacagat ttctcctcct cctttgaaaa ttttgcccag aaccaaaatt tgtctacact gttcttattt tttcaatttc aaatatttaa ccaacagtgc ttcctccaag tattgcacaa attagaattc atttggaatt tcacgagatg tttacacagt gctttgtttc acagacctga tctgttctca atgttgaatg tcattctagt ttatggggga agtatgaaat gaaaagtatt cttaaaaatg ttttattggc tcatgcctgt aatcccaata ccatggggag ctctgaagca caggaggatc ccttgagctc aggagttaag gctgcagtga gccgagatca caccacatgc actccagcct gggatgacag agaaagactt tgeetcaaca caacaccaca ccacacaaac taaatttatt tggtttgett gtateettte attcattaag ccattgattg gattggttga cagacattat taaggcactt tactaaagtt

1020 gccagaaatt ccaggctcag cattagagca cttttaaaat atcaggtgca aaatttgtcc ttatgaaget atggtetaaa gaggggaaga aacgttagtt eggatageta eeacacaett 1080 1106 gaacactgac gacatgcagt acctgc <210> 87 <211> 80 <212> DNA <213> Homo sapien <400> 87 acggctgcca tggtgttgta gggtctttgg tgttaggctc ctggccacca atttccttca 60 80 tqqqttcctq gatctgaaaa <210> 88 <211> 1341 DNA <213> Homo sapien <400> 88 60 cagaaaaaag aacgaggatc actgtacgag ctctcttcgc tgtacggcgc agtgtgctgc 120 atteggttta ccaqaaqttt tactaccatt gattttgcac aatcaataca aatgtcaaaa aagcaagaaa gagcggtaat gactttgtgt tagtgtgaaa attgtgttga tttttcagac 180 ctccagaatg cgtcttaagg tctcctaggg ttacacagat cacactttga gaattgcgac 240 300 ttgaagtttg gagaagcctg cctcatcaaa ggcgtcagat ggagttagga ggaaaaaacg ccaaaaccta aaaccccaaa caacaaaaag tactccattg gattttttag caaggagaac 360 actggcgata gttagttgag acgagtttcg gtgttgatgg tttttcaatc taactgtatc 420 ttaaacttta gtcaatattt acttgtgtga atgtgattta tagaaaaaat atatctctcc 480 tocacttoaa tagatgtatt ttgtccaccc taaatggaaa tgcttaaatg tatggaggca 540 ttaatacatg gttgtcaccg acctggaaga gcatattgaa tttcgtctga ctaggaactt 600 660 aagtgtattt tooctottaa aattatggat otagoatgta aaacaatttg acatgocagg tataacaact caaggggaga acaaatttcc aagtatgtga tagtcagaaa cctacatacc 720 ctctaggtta caatgtaaaa aaagtcaaat gaaatggttc aatattttaa aaacttgctt 780 taaaattgac ttgagtaaac aggtatgggg tcactttggt aatattggag aaaggtatgg 840 gggctcaccg tcaggagtga tacgacatag gaaaggtaga ccatgtgcca cacgcaaacg 900 tattatttat tgacgcatcc ttctataagg ccttcatctt gagtcacgaa attactgtcc 960 tgctgttctt acgtaagcct tccaaagcct cttaaagcac cagtagtatt agcccttcct 1020 taaagaccat taaccatatc taaaaccacc aacctatcat aaaaccctat cataaaagtg 1080 1140 attttcatct agattaaaga acttacaaag ataatgggat tttgattttc tggcattaat 1200 tttattagag taaaatcaat qtctttatga agtatgaatt tctttttcat tcaaaataat 1260 atgttaaget ttggctteta catgcaggat agtgttetat agtacetege eggaceaege taaqccgaat totgcaagat actocattca cactgogcog otogaccatg catctataag 1320 cccagttcgc cctattgtat a 1341

> 60 120

180

240

300

360

420

480

540

600

660 720

780

840

900

960

89 <210>

<211> 1420 <212> DNA

<213> Homo sapien

<400> 89 cacacaaacc caaagaacac gcgaccacaa tccaacagaa tgcataatca ctatacgacc cttggctctc taggatcatg ctcgaaacga gcgacaggtg atgatgagat atctgcacga attoggotta cocttttcta atcatgoatt ataatatcat aaattttcca ttaaagcact gcttttagct agcatcccca caaatttttg cataaattgt tttcatttgc catttagttc aaaatacttt tacatttctc ttgcaggcat ttcttctctg attcatgtgc tatgtagatg ttatgttagt tcaattgcca ctgtggtttg tccttgaagt tttccagtta tctttctctt attgattttt agttcaactt ctattgctgg cctaacactt acgacattgt atgatttctc ttettttaca atttqttaaq qeatattqta taacccagaa tgtggeecat etttgtgaat attotatgtg agettgcaga aaaatgetgt acttttgetg ettgttacaa etgacaagag ctatatacqa tatcaattat atttcgtgga ttatgttatt gaggtcaact tatgtcctta ctgaatttct gcttgctgga tctgtccatt tctgatagag gactattgac agcctttagt tgtaatagtg ggatttacca tattttctcc atgcagttct aacaagtttt tggctttaca ttattttqat gccctgtagt taggcacata cctgtttgag gattgttatg tcgtcctgaa gaagttgacc actttattat tatgtaatgc ccctcttcct ccctgataac tctccttgct ctgaagtcag ctttgtctga aatatagcta ctctttctat tggattgaat gttagtattg tatatatttc tccatccatt tatttttaat ctacatgtgt ctttatattt aaagatggga ttottggtat atatatttat atotttgtat attatattta gttattcgta tttgattcta 1020 gacaatactt tgtcctttta atatggtata tattatgata catatgtata atattaaatg 1080 tgatatgttg atgtatgttg gatctgatct tctacacata tgttgttatc tgctttctgt 1140 ttgctgccct tgttctttgt tcctatttct gtctttcact tattttctgc cttttgagag 1200

55 caatttaata atatttcatt ttcccttctc ttttaacata tcagttatac ttcttcttaa 1260 acaatttttg atagttatcc tggatattgc aatatgtatt tacaatatga aacacatgac 1320 1380 ccacatttca aatgatacta taacacattc accggctagt cagagtaccg cccaacccga 1420 agtacagcac actgcgccgt agaagtgatg cggccggcct <210> 90 <211> 829 <212> DNA <213> Homo sapien <400> 90 gattgtatac agtataggag catggtgatc gatcatggtc gagcggcgca gtgtgatgta 60 gtatctgcag aatcaggett acttgtcttg gtgtttcctc attttattat ttgccttggg 120 gctcacaggt tggcatccct aacttactga aggccattca gagtaaatat tatttaccac 180 240 ttcacatttc acactttaca cttgacactg tatagatttc cacattatta ctgcacactt 300 cccacttaaa tagtatactt ctatttatcc actacacttc atttttgata tattgaagtt atatetttte ettetetate tgttacaaac atetgtetta ecaattattg ttetttetge 360 tttaaacaat cacctttcta aatagattac taggacaaaa tgtcatttac atacgacttg 420 tttgtcatgt tctgtgttct tcatttcttc ctataagatc taattctctt actagtaact 480 attttccatg gttaactgat aaaaaatcag taatctctgg gggtcctggt agttttctca 540 600 gtgttttatc tggtataagg tattaggggg aattgctggc ttcatagaac tgacgttagg gaaacaattc ccatcttctt ctctcgtctg caacagagca tcgtacgaga atttagtcgt 660 aactctattc cttaaatatt cagtatagaa atttatcggg tagaacccat ctaaggcttg 720 gtgctttttg tctgctagat tcgtaacgga ttgattcaat tactttaata ctatatagtc 780 tatttaacta tttcttgtgt gtgatttgga gatgagtttc tagaatgtc 829 <210> 91 <211> 756 <212> DNA Homo sapien <400> tggaccttcg gctttcgagc ggccgcccgg gcaggtacat acataccaaa atgttgatgt tgtcaacggc gggatgagta gctccactcc catgttgaaa tttcactgca ggtgtagaat 120 atattgagat atatagtata tagtgtgtat gctgtgtata tatatgttgt tggggcgcgg 180

ggagaaagag tataagacga gaatagataa gtccagaaat ccaagttaag caatgaagaa

aagatacaga gagagattcc gatgacataa tttctgagat ataacttttt accaataatt

240

cataaattca acaaacaaga caatatattt attatcgcag tgcttatcca caaaattaaa 360 atataatoto titoaaatgi titatitata tiaotatagi tagioaagaa atgitotoot 420 480 cttatattgg tatctctata ataatttgcc atgctattct aatatattag tactataact agtacatett taatacaatt acteatttea tgaggtatae aattttetga atetgtttgt 540 taatccatat aagaaactac gtaatcagag ctatagatct cctttttctt aattgtccta 600 aqaaqaqatg ccctcgaaag ttgtcactgg ccattgtacg ctgatgtacc tcgccgcgga 660 ccacgctaag ccgaattcct agcacactgg cggcgttact atggatcgag tcggtacaac 720 756 ttgggtatca tgtatagtgt tcctgtttaa tgtttc 92 <210> 827 <211> <212> DNA Homo sapien <400> 92 ttcgctccgc tcattgtacg gcgcagtgtg ctgatcggct tacacgcttt gtcttcagtg 60 aggaactaaa gaaaaaaagt ttcgatttta ggcagcgtag ctaaagattg gcaaacttcc 120 accogtgtat ctatgacatt tacgaaagag aactagccat tctaatacca atttaccata 180 aqaataqaca aaatatacaa tgtaatagtt ttcaggcact gggacacatg taatgcaaga 240 aagaaaaccc agaaagaagg gaaactcaaa agtcaggctg ctccctcctc agctgcctgg 300 gaacaatttt cttacaaggg cagacagcta ggagttcaag cagagcacag tagttccaat 360 taagctgagg aggccatggg ctagtagttc aggttaagct aatcaaagca gacattgcac 420 tgttcaccac agagaagacc ccacatgtgc tagagggcaa taaaacaaaa agctcgtcaa 480 gcaaactttc caaaatattg aaattcctat aaatttatgc tgttttaacc accacagcaa 540 ttaaattagt taatctaact actaataata tattaaatct tccaatattt cggaaacgaa 600 accacatate teteaaataa tetatttggt cacagatgaa atgacaaaga acaatteaaa 660 catatattga atttacacta caattaaaga cccacacacc aaattatgga cataccagta 720

acagagtgct tagaggcaca tatatagctt taaatgctct atatcaaaaa aggaagacct

gaaatcatta atcacatacc tctgcattaa aaactttaaa aagtcca

780

<210> 93

<211> 703

<212> DNA

<213> Homo sapien

<400> 93

agcaaagact cagttgacga taaagtggtc tgcccaagtt tacgcagcag agtaaagcaa gtgttcacaa ctcaatataa aaacatgaaa acgaaaagta atttcctact aggagaagag tgggtgagga gaggcagaaa ggaggaggac ggataaatac acctaagata acattactta agtggcataa tototaaago atoggtgtaa atatocaggo toaagaccat gttacaaggg cttcacaatt atgagctata gagaaggaga cacagcttaa aatgatgtcc ctacccaaca acaagaaggg tgcagaatta ctcaccctcc aactataata aaatgactgt acgtagctaa qaaqcatqac acaqqccaaa gctaaccttt gaatccctga cggatagacc tctataatag caaggtatta cacaacctgg cctgcaatta ttattatgta tttgaccatc aacaaatctt gtggaataac catgaacaag gaagggttag aaggtetttt catettatta gacagattat actgagtaac aactatgtgc ccaggcacta agcaaggtgt tacaggtaaa atttttttt ttaaaaaaag gaggtagata atggggtgag aggtacctgc ccaacccgaa ttaccagcac actgcgccgt ataagtgagc gagctcgtcc actggtaccc tcg

<210> 94 <211> 1501

<212> DNA

<213> Homo sapien

gcaccagagt aaagcacagt gttcacaact caatataaaa acatgaaaac gaaaagtaat 900 960 ttcctactag gagaagagtg ggtgaggaga ggcagaaagg aggaggacgg ataaatacac ctaagataac attacttaag tggcataatc tctaaagcat cggtgtaaat atccaggctc 1020 1080 aagaccatgt tacaagggct tcacaattat gagctataga gaaggagaca cagcttaaaa 1140 tgatgtccct acccaacaac aagaagggtg cagaattact caccctccaa ctataataaa atgactgtac gtagctaaga agcatgacac aggccaaagc taacctttga atccctgacg 1200 1260 gatagacete tataatagea aggtattaea caacetggee tgeaattatt attatgtatt tgaccatcaa caaatcttgt ggaataacca tgaacaagga agggttagaa ggtcttttca 1320 1380 tottattaga cagattatac tgagtaacaa ctatgtgccc aggcactaag caaggtgtta caggtaaaat ttttttttt aaaaaaagga ggtagataat ggggtgagag gtacctgccc 1440 aacccgaatt accagcacac tgcgccgtat aagtgagcga gctcgtccac tggtaccctc 1500 1501 g <210> 95 1408 DNA <212> Homo sapien -2135 <400> 95 60 eggegegagt getgacaate cagtttacgt gategeggee gagtetggte tttettttte ccctcaaggt ctctattgag ctcataaaac atttgcggtg taactatttg ggtcccaggt 120 taageettee caatgattat caattacatg agaatateta etgtatttee aatteetage 180 acagtgcctg gcatccagaa aatgctgagt aaagttactc attgaataat taagaaattt 240 tttaaaaatt aaatttccat ttcactagac ctaatttgct ctaattgcct tgaaaagtgg 300 cagccagaga gggagagcta ggtagtcccc ttggggtcca cgataaccac aataagtcta 360 gctagacttt tatgaaacaa gagacctaag tctacggtct ggcatctagc attcagcaac 420 ttagccgggc agaattttgt gactgagttg ctagtaggta ttaggatcca agaagagaca 480 gagaggaagc ctagtaatga aaaacccagg agtagtgtta ccaggtagag ccaaatgaca 540 600 aagtotcaaa aacctaagca ttgtcagcta gtagtctgag agtaagacaa ttggtccctg cctcaaagat ccaagaggaa cggctggggt ccaacgatca gcgaaccata gcccacttga 660 720 atgttcagga ggagaaactt atatagggca acagaataac tggaagaaaa tggtcttagt attoctaggo caaagaggac tgaaatagco agaactattt ttgttagaag tgctataaat 780

cccatgaaca aatgtgaact acagaaagaa gacgtggagg aatagctgtt ttgttccttt

ggaacccaaa gtccccaatg agtgtcttgt agtaagtgta ccatactgtc tctgtttcct 900 960 catctagtac tgttgatgta cetetetata atacacacat ctacagteaa atetetetac 1020 attcacattc tcacaaaata aagaatggaa tgccaataag taacccagca cattgtttga caacctagtt tataacaacg tttattgtct gcgtgccaca cgtgaccttc tgaagaaatt 1080 gaggaageet tetagettat atggeactat aagteeatag cagactataa gactaegatt 1140 ttaacccaat ggtggtttgt gaccaacttc acggttattt gctgaggagt tccttcattc 1200 1260 tggttggttt tgatttgttg tttatttttt tttgtaattt gcaaaacagt ttattgcggg gttctacaag gcacttctag cttctaggaa acctgatagg ggtatggtag actgatgagg 1320 acatatgccg ttacccaggg tacctgccca agtcgaattc ctagcacact gcgccgtact 1380 aatgaggget egtteteett gggateet 1408

60

120 180

240

300

360

420

480

540

600 660

720

780 840

900

960

96 <210> 2067

DNA

<213× Homo sapien

<400> 96 qtttctgcat ggccaagagc cagaccctcc ctctgggctc tgctggccca acccaccaag ggatgcttta tttaaacagt tccaagtagg ggagaccagc tgcccctgaa ccccagaaca accagetgga teagttetea eaggagetae agegeggaga etgggaaaca tggtteeaaa actgttcact tcccaaattt gtctgcttct tctgttgggg cttctggctg tggagggctc actocatgte aaacctecae agtttacetg ggeteaatgg tttgaaacce ageacateaa tatgacctcc cagcaatgca ccaatgcaat gcaggtcatt aacaattatc aacggcgatg caaaaaccaa aatactttcc ttcttacaac ttttgctaac gtagttaatg tttgtggtaa cccaaatatg acctgtccta gtaacaaaac tcgcaaaaat tgtcaccaca gtggaagcca ggtgccttta atccactgta acctcacaac tccaagtcca cagaatattt caaactgcag gtatgcgcag acaccagcaa acatgttcta tatagttgca tgtgacaaca gagatcaacg acgagaccet ccacagtate eggtggttee agtteacetg gatagaatea tetaagetee tgtatcagca ctcctcatca tcactcatct gccaagctcc tcaatcatag ccaagatccc atototocat atactttggg tatcagcatc tgtcctcatc agtctccata ccccttcagc tttcctgagc tgaagtgcct tgtgaaccct gcaataaact gctttgcaaa ttacaaaaaa aaaaaaaaaa aaaatcaaaa ccaaccagaa tgaaggaact cctcagcaaa taaccgtgaa gttggtcaca aaccaccatt gggttaaaat cgtagtctta tagtctgcta tggacttata gtgccatata agctagaagg cttcctcaat ttcttcagaa ggtcacgtgt ggcacgcaga 1020 1080 caataaacgt tgttataaac taggttgtca aacaatgtgc tgggttactt attggcattc 1140 cattetttat tttgtgagaa tgtgaatgta gagagatttg actgtagatg tgtgtattat 1200 agagaggtac atcaacagta ctagatgagg aaacagagac agtatggtac acttactaca 1260 agacactcat tggggacttt gggttccaaa ggaacaaaac agctattcct ccacgtcttc 1320 tttctgtagt tcacatttgt tcatgggatt tatagcactt ctaacaaaaa tagttctggc tatttcagtc ctctttggcc taggaatact aagaccattt tcttccagtt attctgttgc 1380 1440 cctatataag tttctcctcc tgaacattca agtgggctat ggttcgctga tcgttggacc ccagccgttc ctcttggatc tttgaggcag ggaccaattg tcttactctc agactactag 1500 ctgacaatgc ttaggttttt gagactttgt catttggctc tacctggtaa cactactcct 1560 gggtttttca ttactagget teetetetgt etettettgg atectaatac etactageaa 1620 ctcagtcaca aaattctgcc cggctaagtt gctgaatgct agatgccaga ccgtagactt 1680 aggtotottg tttcataaaa gtotagotag acttattgtg gttatcgtgg accccaaggg 1740 1800 gactacctag etetecetet etggetgeca ettttcaagg caattagage aaattaggte tagtgaaatg gaaatttaat ttttaaaaaa tttcttaatt attcaatgag taactttact 1860 cagcattttc tggatgccag gcactgtgct aggaattgga aatacagtag atattctcat 1920 1980 gtaattgata atcattggga aggettaacc tgggacccaa atagttacac cgcaaatgtt ttatgagete aatagagace ttgaggggaa aaagaaagae cagaetegge egegateaeg 2040 2067 taaactggat tgtcagcact cgcgccg

<210> 97 1300

<212> DNA

<213> Homo sapien

<400> 97 cteegggeee eegeegetee ggtgetgete geggeeteeg eteetgegeg eegteegeet 60 ctcctccctc gtccctctgc gttcgtcgcc cttcccttcg ccgccccgcc tcggtcgtcg 120 180 egtegegege eteggeette tecetecetg etegegeact eegeegttte geteteeteg tteggtgact tecegeggeg egtegegeeg etgecagteg eegeceatge ettegeeete 240 tototottaa toatagooto otttgtgoto tootaatogt totgotogot ggtgaaaact 300 tegegtgaaa geegtgaatt etaeteaetg ttetaacace caeggaatae taegetatet 360 gagccactga tttacgtcca cacgccgtgg tatccctgaa gctccggaga tccacctatg 420

ggcacaggtg gcgcggcaga tctacgaggg tcacggagat cgagaaccat ctctggcgtt	540
acatcacgtg taaccccact tttgtatctt ataaagaata caaaaaaatt aatccacggc	600
gtatggtggc gggtgcctgt agtcctatgc tatttcggga ggctgaggca ggagaaatgg	660
cttgaaccca ggaggcggag attaacatgt gagccaagat cacgccactg ctactccate	720
cttgactacc tagagcgatg catctccgtc tcaacaaaaa attaattaaa attaaataac	780
acatacacct ccaagaagtt attottaacc atacggttaa cagtgtgcct atcataggga	840
aactgcagag tgacacaagc tatttcttta aaggactatg taaaaagaat ataatacgtt	900
aataacattt tggttctaag agcccaaatt attgcaatca taagacctga taagagtagg	960
aactaataag ggaaataaat aaagtatgtg cactccattc gtatatatgt tgcgcaggct	1020
acataacgat aacatgogta ttgtatatat atatgcagtg ttagtaaaga aatagacggt	1080
tcactttaca ttttaatttg aagtaattac gtaattcaaa tacataacat agtaatgtct	1140
aatttccaat ttactgtggg gtaaaacata agagccagta aaaactttag caaaatgcaa	1200
aaagaccgag tgggaaaaac atagagtaag gcactgtaac acacagtaca cgtccgcccg	1260
gaccatcgta accccgaatg tccagcacac tgcggccgta	1300
<210> 98 <211> 757 <211> DNA <213> Homo sapien <220> <221> misc_feature <222> (256)(256) <223> a, c, g or t	
<400> 98 toagtggteg ageteggete acttgtaaeg gegeegtgtg etggaetteg ggtttegage	60
ggccgccggg caggtacttt acttttcaaa aacaactcaa taatgttgca caaaaaacaa	120
caatagaaaa aataaaagtt tggtgggggt gcgtgaacta aaacttcaaa gtcaccaaga	180
acttttaatg tgaacaagaa ttggaagcaa ggggtttgtt aaatgcgaat ggtaagagag	240
aaccccaaaa ctaganattt aaattaaaac caaggaatag aaaacaaggc tgcctgggtg	300
aaaatggttt ctgagaaacc aatccaaatt caacctgtca agaatgctga ataagaacta	360
agettettea agaatgitti teetaaccaa ggitteaagaa gaatggggit aaatgaacta	420

agttccaaat ggggaagaaa aagcaaagaa tggaatttac taaaccaagt aaattttaaa

480

tatatcaggc tcgaccacag tgtgcctgga aattctggct tgtgatagcg gcccgcccga

			62			
caatagtaca	ctttttttt	tattttttgt	gtgacaaaca	acaaaccttc	ggccgcgcca	540
ggcttaagcc	cgaatttctt	gcaaattatt	cacattacac	actgtggcgg	cacgcttcag	600
agccatgtgc	ttcttaaagg	ggcccaattt	cggccctatt	agttgaaact	cgtatttaca	660
atttcacgtg	cccgctcttt	ttacaagcgt	cgtgaattgg	gaaaaccctt	gggcttaacc	720
caatttattc	gcttttcaac	aaattccctt	ttcaaaa			757
	sapien					
<400> 99 acaaatagaa	ggtacgcttt	tataactggt	caagtgcagg	agcgctgacg	catagattgc	60
atggcgacaa	gttatcatca	tagtggtggt	gggaacatgc	attccgtgca	tgctgatgtg	120
gtgcttagga	gccagccttc	cgtctgtact	attttaagaa	taaagtctct	acatccctat	180
ggaccagaag	ctattaagga	acagtggatc	tgagagaatg	actgtagcac	atctagtgta	240
ctctgcctcg	ggacggatcg	tgtcgcaata	ttctcgcgag	attatgccat	ctatcactga	300
gtcggtgcgc	gtcgtgagca	gtgctatctt	acgcaggtgc	gctcaagttg	ctgcctcttt	360
atagatgagc	tctgtgattc	acagagtgtc	acgtgggccc	gttcgctttg	tacgataggg	420
tccgtgacct	agtggaccat	agccactggt	cggtaatccc	catacgtgta	attccgcctt	480
tgtcagtcag	caatccaccc	tgttgcgaca	ggagagctga	cacctacatg	gagtattaaa	540
gcagaacgac	cacaatagca	ttcactttcg	tagatcgaca	tttacagaag	acaaatagag	600
ttgacactta	ggagaacgat	gaacacgttt	actcagctgg	atttcaggca	gaaattattc	660
acaaattggt	ggatgaccag	taaaaaagtg	gatctcaaga	tataatggca	accaatgata	720
ttcttgtttt	catttgagac	ctacaggctg	ttagtaatct	ttttaaaact	aaagcagcta	780
ttagt						785
<400> 100 ccatcagaaa	attctacact	catataggaa	ctcttgtgct	tcatcgatgc	atgcgtcgag	60
cggtcgacag	tgttatgtat	atctgcataa	ttcaggctta	ccacaaaatt	acatttttct	120
aaaattatac	atttctatac	agtttcctac	tgatccctac	ctctgcccaa	tgaaaatctc	180

aaaacaatcc tggccaatgg aattggcaaa ttgggaatta cattaaactt tgccttgtga

300 agttgtggca gactctccag actttattgg atacaagcac gtagaagtct ttgtgttaaa ctacaggaat actgactact tgtgtgaagt ctatgttgtg tagtatcctg taagttttaa 360 420 toaattttcc ccttactcaa aaattctcct tagatttagt gtcttagggt atttctttcc gttgtgaaca agctactaaa tcgcagtgta aagtgtgtct agtttattgc aactattaaa 480 aggttaattt tgtaaaaatt taatettgte aacgtaceet tgtcaaaatt gtteegtatg 540 taagtaaatc gtcttgaaat caaccgtaaa aagaggagac tcctggggtt ttcttaatca 600 atctgtatgg aaaaggaaga aattggtctt tatacctata aagtcttggg ctaaaccttt 660 ttggccatta taactaagag cgtcaaaccc tggggtgaga atggcgtatg aaggggcacc 720 tecettgece tttgttetet ttaaattate tetgeaaata tttettaaca gtaattetee 780 accccaccaa aatcaagttt agtccctctt tctgcccttc aagtagagac tttttttcgg 840 900 acceptett etteeteeaa aacettttt ttetttttt etggaettgg etacaegaat tottatcacg actacgtctt ttgagatctg actcttgata tataacttgt tttattttt 960 ctttttcact ttcgttgata cattcagctt atttgatttc tgtaatatgt aagccattct 1020 tgtacetegg ecegaceaeg etaaacegaa ttgecageae actggegee 1069

<210> 101 <211> 1004 <212> DNA <213> Homo sapien

<220>

<221> misc_feature <222> (719)..(971) <223> a, c, g or t

<400 > 101
ggccattg tgctggcaat tcggtattac caccaacagt aaattccatt gacattgagt
gacagtgctt cacaccactt atccttctg cactagcacc aactaataaa taataaattt
gtctacttta tagaagaatt ctacttccag ccatctcagt gcattttcac aacttacaag
gtcagcaggt caggtattat acctatattt ttttattagt taatattatg tattatatg
taacaggcac tttgatctta ctactgaata ttagtaggc tattatatat acagtagaat
gaaaccgaag cccagagagg gtaagtagac ttctctagat cagacagtag tcaaatatta
gagccctaca tgaataaatt ctctacattc ataatagctt actactttac acaatatta
tatgtaattt ctttctttt ttttttttt tttggaaact tattctctt ttgtcccca
ggccggactg cggactgcag tggcgcaatc tcggctcacg tgcaaggcct ccgcttctcc

60

120

180

240

300

360

420

480

600 egggttteae gecaatteet eetgtgecaa teageeteee eeagtagetg ggatttaeag gcgttgtgcc accagtgccg tggcttaatt tttgtgttat tttatagtaa aagacggagt 660 720 tttcaccatt gtttggccaa acgtggttct tgaacctcct tgaccctcag gttgactcnn 780 840 900 960 1004 nnnnnnnnn ncaaacgggc ggcgagagcc caccgcgggc cggc <210> 102 1033 <212> DNA Homo sapien

60

120

180 240

300

360

420

480

540 600

660

720

780

840 900

960

<400> 102 gcaatgtgct tggcaattcg ggttacgagc ggcgcccggg caggtacacc aaggctggtg catttaccag gaagtggatt aaggacacca tetgeagtee aaceteetge agtgeeceat ggtcccaccc catacctcta gctacaattc tacgtccacc tcacagttct ggacatcact tggacttata ctaggatgct aggacaccat gaagacttgg aactacacct ggaccgaagc tacgagtect acctgagtac ctactgacet getgtettte atggtgtgag agtccaggge gtgctagcga aacatggaag tggcgcacga cacagcgtgt atgccaactg tcttctgaaa ctgggtataa cctttcggtc ctcgtcctgt cggaacacgt ggactgtcat ctgacagact tetegegtea ggttateacg tgaggacaca cgacaacaga cgctgggtgt accagtgttg tatacgtgcg ggatgcagga gaatgggagg gcgtggcggc ccaacccatg gcaagagtgg acatgttgat tcactaaggt ggaacacgtc gtctacagga tcacgtgagc gcatacggct cggaggccac aagtgcagtg gaggcacaca cacagcagcg aaggcatgac gcttgtacca cagtaggccc aaaggctggt cctgggggca cactgggaga agcctaagaa taaaggccgt gaggcacgaa agaagaaggg gagaggagtc ctcctaatgt tgttgaaagg agagggagac taagggggag agaaaactga aaagctgaat taaattaaca caggagaggt ttgttcaagg teccectata accacegtea gattttgatt gattgteeet ageaggaact etacagaaga tacagageta teatggetgt gggttaaaaa aaaaacaaaa aaaaaaaaa aaagettgta cctcgccgcg accacgctaa gccgaattcc agcacatgcg gccgtacaag tgatgccaag 1020 1033 ctcggaccca ctg

<210> 103 <211> 654 <212> DNA <213> Homo sapien <220> <221> misc feature <222> (192)..(382) <223> a, c, g or t <400> 103 ttgggcaggt accaaatgaa aatatettte aaaattgagg gtgacacaaa tatttttte 60 agatatcaga ccctcaatat aagagatgtt aaaggaagct tttcaggcag aaggacaagg 120 acaccagatg gaaatttgta tctacacaaa ggaatgaaga ggtccataag tggtaaatat 180 240 300 360 nnnnnnnnn nnnnnnnnn nncttgttca tgtctttttc tatcttcaat ggctgatcaa 420 gecetteteg tgacgtette tetetggtte tgacgtttet geceetcate atececattt 480 aaaggtettg tgatttatat tgggeteace tgagttatet aggetaetet ecetattttg 540 aggttagctg gttaccaacc ttaattcagt cttcaaactt aattgattct tgccttgtaa 600 tgcaacaatc acagggttct ggggattaag attggaaagc ttgggggtca ctat 654 <210> 104 466 <211> DNA <212> <213> Homo sapien <400> 104 acagttaacc cctccatgga ttatctactt tttggattat ttctagcacc ttctaaattg 60 tagagggatt ttcccctact gttcagcatt cttctgagtc atctaacctt cttcagttgg 120 tagtttaagg aatgtaaatt agttttctat tagcctaaac aaacacaatt agaaaggaaa 180 atcccttgag gcaaagaaca cctatcaaag ccaaacaaat tacctctgac cattgtaatc 240 agggaaataa atgaggaacc aatgtaatta tetttttaat egetggggaa agtgttttaa 300 tgttttcttt tatagatttc ttcagtattg tgtaatacta atgttctttt atattcgtgt 360 taaatcactc cttttgccaa cctgagtcca ttctcttttg gggacagcgg gaaagtagat 420 466 gagetaacct catttattet caatgeactt tecateettg teatgt

```
<210> 105
<211> 545
<212> DNA
<213> Homo sapien
<400> 105
ggagacgtga gatggaagag agaagaacca agacacgagg cgatgaagag aatagaagaa
                                                                   60
aggtatatga ataaggaaag aatcaagaac agacaagcta gatgaacaag cgacaggaag
                                                                  120
aagagagag aagaaggaag agagagcaaa cagaatcaag acagaacaag acaagagata
                                                                  180
taagaataga gaagaacaag aacagagaac aagacacaag aacaagacac aagaagagat
                                                                  240
                                                                  300
aagaagagca acaagaagaa gaagaagaac aagaagaacg aacaagaaga agaaacaaga
acagaagaag aaggacccta gcaccagtag caatacaagt gccttttctt tcattttctc
                                                                  360
                                                                  420
tttcttttct tttcttttt tctttcttgt atatctgtat gtatgtatgt atgtatgtat
480
gaacctcgcc gcgaccacgc taaccgaata cacacactgc gccgtacagt gagcgagctc
                                                                  540
                                                                  545
qtcca
      106
<210>
<211>
       560
       DNA
<212>
<213> Homo sapien
<400> 106
ttcgcagaat tcgcttcgag cgcgcccggc agtacttgaa agataataag tgtctcattt
                                                                  120
acagcatgtc aaaacaaagt ttggtattaa ctacttgatt tatttatctg agtcattttt
qccacatgat ccagattgtg ctttttactg attatagttt gttcacttga gggaggagcg
                                                                  180
ttttatttga gtctatatgt gtatctttaa cacagttttc actcatacac aagaagctac
                                                                  240
aaatcattgc agtcctttgc atactttgta aaataaattt cagaagctct ttttccaaat
                                                                  300
qqaacqaaac cacctgggat tgaaaggaga ccatgatcct tgggttggaa aacacttaat
                                                                  360
cttgatgtca tatgtaatga aaataagctc aaagctaaac gttgatctcc ttggcataaa
                                                                  420
                                                                  480
attoccccat gtcctgagta tccataggtc tcaaccttgg tcgagcaatc catggacaat
cacagtgggg gaagagcagg acagaaatgg aggaaatgtg gtaataatat aattcatctc
                                                                  540
                                                                   560
ctccttaacc tgtgatggag
```

<210> 107 <211> 469 <212> DNA

<213> Homo sapien

<400> 107 actgccctgt	gcttgcttta	ggtttggtat	actcttttt	cagtgtttta	acatataatg	60
gcaggcaatt q	gattttatat	ctttcatttt	ccttatatag	gttgagtgtt	ctgcagatgt	120
ccttcaggtc	tatttggttt	atattgtcag	tcttctattt	ccttcttgat	tttctttgta	180
gttgttctgt	ccatttttga	aaatggggca	taggagtccc	ataaaatgtt	attttttatg	240
tctagtaata	cttttggttt	taaaatctat	tattcctgat	agttgtatag	cttctctagt	300
atttttttgt	aattgctgat	tgcatgacat	atttgtttct	attctttagc	tttcaatcta	360
tacttacctt	tgaatctaaa	acttgtctca	tgcaaaaagc	acaatgttca	atcattttta	420
ttcagtctga	taatctctga	gtttcaattc	gatttttagt	ccacttacc		469
	sapien					
<400> 108 taaagttccc	ttttttgttt	tatttaaata	attctagcaa	gtagatgaag	ttactttttg	60
tttgcgtttc	ctgcaactat	tttgttatta	tttatttatt	taagcagaga	attgtctttt	120
aaaaggatta	aaactgggaa	gtttgaaatt	tatatttatg	ggaagtagaa	tagtgac	177
<400> 109 actgggatta <210> 110 <211> 824 <212> DNA <213> Homo	sapien caggcatgaa o sapien	ccaccatacc	cagccca			37
<400> 110 gctttcgagc	ggccgcccgg	gcaggtacaa	gctattatta	tatatatata	tatatatata	60
tatatatata	tatatatata	gagatatata	tatatatata	tatatatata	tatatatatt	120
atatatatta	ttattattt	tattatttt	ttattattat	atttaactct	atttattata	180
tcaatacaat	attattatat	atatattatt	catctttcca	tgcggccaca	cccaacaaaa	240
ttgccacaat	acaaccacga	acacaccaac	agcgaaaata	atgaactatg	agagcaacga	300
gaaaaaaaca	cacactcacg	acagaagtag	agagaaaaa	tatcaatcaa	ctaaaagctc	360

cccgaccacc aaaagaccta ctaatacata tcacatcata agagaaaaga tacaagaaac 420 480 cagacaaaca aactagctca taaaccaaac attaaaatac acaaacaaga agaaataaga caacaaaaaa caaataacca aaaaccacac acaaagatag agaaggagga gcgagacaag 540 600 aacagaaaaa agcacgaaac aagaacacaa cagcgaagaa gagagatgca cggagcagca 660 aacaqaacag cagagacgag cgaaagaagg cgggagaacg gaaggcgacg gaaagcagca gcgagagaga gaaaaacaag aagcggacag cgcaacacga agacgcgagc accgggcgcg 720 780 qacaqcaaag gaacaacaag cagaacagct cgccgcggac cacgaggagg aagcagcaac 824 gaagaacgaa aaaacggaaa aggaaggaga gaaaggcggc acag

60

120

180 240

300 360

420

480 540

600

660

720

780 840

881

<210> 111 <211> 881

<212> DNA

<213> Homo sapien

<400> 111

acggettate gageggeege eegggeaggg gtacaaagee tattatatat atatatata tatatatata tatatatat tataatatat atattatatt tetteteett etatettet cttttattta tataatatta tatqtactaa taatatacac aaacaatatc ctcaaaaaaag agagagcaga gacgagagat ggagagggaa cttatccaca ctcacacccg cgcgctccac cacacagagg aacaacaaca gagggcggac gcccgacccc acctetetet eteteatetg gagaggagca cagctctgct gcagctgcgc agagaagaag acggcgcgca acatatcaga cqaqatqaqa qaqaaqaqa aaqqqqacqa gacgagaggc cagaggcagc aaaaagggag acgacacgac gagcgacaac gagacagacg aaagagaagc cggatgagga gcgggaggaa ggacgaccga cagagaagat gatggagcag aacgtccgac gacagaccgc aaacgagcac qcaqacaacq caaqaacaaa cagaaggccg aaggaaggac agacgaagcg gagagaggac ggcagacggc cgccagaacc aacaaaacag gacagccaac agaagaagcg aacagaaagc acaaggaccg agcagcgaac aaacgagcca agcaaccagc t

<210> 112

<211> <212> DNA

¹⁰³⁵ <213> Homo sapien

<400> 112 gcaatgtgct tggcaattcg ggttacgagc ggcgcccggg caggtacacc aaggctggtg 60 120 catttaccag gaagtggatt aaggacacca tctgcagtcc aacctcctgc agtgcccgct qtcqccaqcc cctacctgct agtaaattat aaagtcccac atcacggttc tggcagtcac 180 ttqqacttat actaqqatqc taqqacacca tgaagacttg gaactacacc tggaccgaag 240 ctacgagtcc tacctgagta cctactgacc tgctgtcttt catggtgtga gagtccaggg 300 cgtgctagcg aaacatggaa gtggcgcacg acacagcgtg tatgccaact gtcttctgaa 360 420 actgggtata accttteggt ectegteetg teggaacaeg tggaetgtea tetgaeagae 480 ttctcqcqtc aqqttatcac gtgaggacac acgacaacag acgctgggtg taccagtgtt 540 gtatacgtgc gggatgcagg agaatgggag ggcgtggcgg cccaacccat ggcaagagtg gacatgttga ttcactaagg tggaacacgt cgtctacagg atcacgtgag cgcatacggc 600 teggaggeca caagtgeagt ggaggeacac acacagcage gaaggeatga egettgtace 660 720 acagtaggcc caaaggctgg tcctgggggg cacactggga gaagcctaag aataaaggcc qtqaqqcacq aaagaagaag gggagaggag tcctcctaat gttgttgaaa ggagagggag 780 840 900 ggtcccccta taaccaccgt cagattttga ttgattgtcc ctagcaggaa ctctacagaa gatacagagc tatcatggct gtgggttaaa aaaaaaacaa aaaaaaaaa aaaaagcttg 960 tacctcqccq cgaccacgct aagccgaatt ccagcacatg cggccgtaca agtgatgcca 1020 1035 agctcggacc cactg

<400> 113

Met Lys Val Val Thr Gln Thr Met Glu Pro Asn Lys Ser Asn Arg Thr 1 $$ 5 $$ 10 $$ 15

Asp Lys Glu Lys Ala Gln Glu Thr Gly Pro Gln Leu Val Glu Lys Leu 20 25 30

Asp His Lys Thr Arg Thr Ile Ser Phe Arg Lys Arg

<210> 114 <211> 61

<210> 113 <211> 44

<212> PRT

<213> Homo sapien

<212> PRT

<213> Homo sapien

<400> 114

Met Ala Pro Cys Ile Gln Asp Ile Ile Pro Lys Gln Thr Leu Leu Ile

Lys Thr Ser Lys Ile Ile Ser Pro Val Tyr Val Pro Phe Lys Val Arg 20

Gln Val Cys Phe Asn Arg Gln Ala Gly Cys Leu Leu Tyr Phe Tyr Arg 35

Gly Lys Thr Ile Ile Ile Phe Asn Glu Trp Asn Gly Lys 55

<210> 115 <211> 134 <212> PRT <213> Homo sapien

<400> 115

Met Cys Glu Asn Pro Phe Leu Leu Tyr Leu Tyr Ser Ile Leu Leu Gly

Tyr Ile Phe Ser Gln Ser Ser Pro Thr Ile Ile Phe Tyr His Asn Val

Cys Ala Pro Lys His Leu Cys Val Cys Leu His His Phe Ile Asp Ser 40

Ser Ser Leu Arg Leu Leu Arg Glu Leu Thr Phe Cys Gly Ser Leu Cys

Tyr Lys His Asn Met Leu Phe Ala Arg Arg Gly Ser Leu His Val Gly

Leu Leu Ser Ser Ser Arg Asn Leu Leu Leu Val Ile Ser Ser Ser Ile

Leu Leu Ala Cys Tyr Thr Pro Leu Leu Cys Leu Gln Ile Phe Phe 105

Tyr Cys Trp Glu Thr Thr Pro Gly Thr Val Phe Glu His Phe Phe Ser 120

```
Phe Val Asp Pro Asn Leu
   130
<210> 116
<211> 35
<212> PRT
<213> Homo sapien
<400> 116
Met Ala Leu Leu Pro Leu Ala Leu Gln Phe Phe Tyr His Leu Ile Pro
Leu Leu Phe Leu Val His His Leu Lys Asn Thr Phe Phe Arg Ser Phe
          20
                               25
Tyr Arg Pro
       35
<210> 117
<211> 48
<212> PRT
<213> Homo sapien
<400> 117
Met Gly Arg Phe Gln His Leu Ala Pro Asn Pro His Leu Ser Gln Ala
                                  10
            5
Pro Ser Thr Cys Ala Pro Thr Ala Tyr Ile Thr Asp Ser Leu Leu Pro
            20
                                25
Leu Gly Glu Ala Ser Cys His Leu Ser Glu His Gln Cys Pro His Leu
                           40
        35
<210> 118
<211> 87
<212> PRT
<213> Homo sapien
<400> 118
Met Pro Lys Ala Pro Phe Gly Glu Phe His Ile Lys Glu Val Thr Asn
Leu Cys Ser Glu Arg Ile Leu Glu Val Ser Met Cys Arg Ser Val Thr
                                25
```

Thr Ile Val Ser Phe Lys Pro His Arg Thr Tyr Gln Leu Gly Leu Phe

TOOCHUVE LANGUA

Phe Phe Trp Leu Leu Val Ser Gln Asp Lys Cys Val Val Leu Gln Asn

Arg Asn Glu Met Arg Met Lys Val Phe Cys Val Phe Phe Asn Val Ile

Lys Glu Arg Ser Leu His Lys 85

<210> 119

<211> 35

<212> PRT <213> Homo sapien

<400> 119

Met Asp Leu Ser Leu Cys Cys Pro Gly Gln Phe Leu Lys Pro Leu Trp

Pro Gln Ala Thr Leu Leu Tyr Leu Gln Pro Ser Gln Ser Trp Leu Gly 25

Leu Gln Val 35

<210> 120 <211> 51

<212> PRT <213> Homo sapien

<400> 120

Met Ala Arg Asn Gly Val Gln Met Ile Thr Ser Asn Gly Lys Lys His

His Phe Ser Asp Trp Pro Phe Leu Tyr Asn Ser Glu Leu Thr Leu Thr 20

Trp Leu Pro Val Lys Tyr Lys Gln Leu Asp Ile Cys Val Pro Pro Lys 35

Phe Val Cys 50

<210> 121 <211> 32

<212> PRT

<213> Homo sapien

<400> 121

Met Val Ile Lys Lys Val Asn Ser Arg Lys Ile Lys Pro Leu Tyr Leu

Arg Glu Asn Gln Trp Asp Cys Phe Glu Asp Thr Glu Cys Lys Ser Leu 25

<210> 122

<211> 83 <212> PRT

<213> Homo sapien

<400> 122

Met Lys Ser Cys Phe Phe Leu Leu Met Thr Ala Gly Ser Thr Leu Met

Pro Pro Phe Ser Phe Met Ile Pro Phe Val Cys Ala Ala Ser Cys Ser 20

Leu Phe Phe Arg Tyr Ser Val Ser Pro Glu Val Cys Leu Arg Ser Ser 40

Lvs Thr Gln Leu Leu Ala Phe Leu Met Phe Ser Val Ser Cys Phe Met 55

Lys Ala Cys Phe Thr Ile Ser Ser Val Phe Asn Cys Ala Ile Leu Phe 70 75

Leu Ile Ile

<210> 123 <211> 39 <212> PRT <213> Homo sapien

<400> 123

Met Phe Ser Pro Glu Phe Leu Val Leu Glu Leu Leu Phe Gln Thr His 5

Tyr Phe Leu His Ser Thr Ser Phe Thr Tyr Leu Tyr Trp Leu Phe Ser 20 25

74 Ser Asn Leu Gln Ala Thr Val 35 <210> 124 <211> 41 <212> PRT <213> Homo sapien <400> 124 Met Val Ser Ile Ile Ile Val Ser Asn Asn Tyr Lys Ile Val Ala Ser Lys His Ile Leu Leu Tyr Ser Ile Ile Asn Arg Tyr Lys Lys Pro Thr Pro Thr Thr His Leu Tyr Ser Gln Gln 35 <210> 125 <211> 61 <212> PRT <213> Homo sapien <400> 125 Met Ser Ile Phe Cys Leu Leu Val Gln Ser Asn Ser Arg Asn Cys Gly Asp Ile Lys Lys Cys Phe Leu Glu Arg Lys Asn Asn Leu Gly Ile Phe 2.0 Ser Phe Phe Cys Cys Cys Arg Ile Leu Ser Ser Tyr Cys Ile Met Val 4.0 Thr Leu Trp His Ser Val Val Phe Val Gly Leu Tyr Asn 55

```
<210> 126
<211> 25
<212> PRT
<213> Homo sapien
<400> 126

Met Leu Phe Ser Glu Asn Trp Leu Ala Phe Phe Phe Phe Leu Phe Phe
```

10

Tyr Lys Leu Leu Thr Leu Val Cys Arg

1 5

<400> 129

```
<210> 127
<211> 66
<212> PRT
<213> Homo sapien
<400> 127
Leu Phe Phe Phe Phe Glu Met Glu Ser Cys Ser Val Ala Arg Leu
Glu Cys Asn Gly Met Ile Ser Ala His Cys Asn Leu His Leu Pro Gly
Ser Ser Asp Ser Pro Ala Ser Ala Ser Ala Val Ala Gly Thr Thr Gly
         35
                              40
Val Cys His His Ala Gln Leu Ile Phe Val Ile Leu Val Glu Met Gly
Phe His
65
<210> 128
<211> 58
<212> PRT
<213> Homo sapien
<400> 128
Met Asn Asn Leu Arg Gln Lys Glu Glu Tyr Asn Thr Phe Ser Ile Phe
Ser Ser Ser Asn Phe Gly Lys Tyr Gln Asp Phe Ala Thr Leu Leu Leu
Phe Leu Phe Leu Ser Phe Pro Ser Leu Pro Phe His Leu Gly Arg Pro
                             40
His Val Ser Arg Ile Ala Ala His Cys Ala
 <210> 129
 <211> 50
<212> PRT
<213> Homo sapien
```

Met Ile Arg Arg Gly Val His Cys Ile Phe Thr Gly Arg Ala Val Leu 5

Gln Ala Tyr Ser Ser Ile Phe Ser Ser Val Phe His Asn Phe Ile Cys

Arg Gly Leu Ile Thr Ser Leu Phe Gln Tyr Ile Pro Arg Val Tyr Tyr

Ile Ile 50

<210> 130 <211> 22

<212> PRT

<213> Homo sapien

<400> 130

Met Phe Lys Phe Met Ser Tyr Ile Asn Thr Lys Lys Ile Leu Phe Leu 10

Leu Glu Thr Gly Arg His 20

<210> 131 <211> 22 <212> PRT <213> Homo sapien

<400> 131

Met Gln Asn Lys Arg Phe His Arg Arg Thr Ser Ser Ala Gln Lys Phe 10

Thr Ile Val Pro Thr Leu 20

<210> 132

<211> 56 <212> PRT <213> Homo sapien

<400> 132

Met Ala Lys Gly Lys Ala His Arg Ser Ile Glu Gln Asn Arg Glu His 5

Arg Asn Lys Pro His Lys Leu Leu Val Phe Gln Ala Ile Leu Thr Lys 20 25

```
Ile Ile Gln Lys Lys Lys Ile Ser Leu Ser Asn Lys Trp Cys Leu Pro
                            40
Ile Trp Pro Ser Met Cys Lys Thr
<210> 133
<211> 27
<212> PRT
<213> Homo sapien
<400> 133
Met Glu Glu Trp Thr Gly Leu Gly Lys Tyr Val Lys Ile Ala Ser Ser
Ser Glu Gly Pro Leu Asn Asp Phe Asp Leu Lys
            20
<210> 134
<211> 49
<212> PRT
<213> Homo sapien
<400> 134
Met Pro Asp Leu Glu Val Ser Ser Met Thr Leu Ile Met Pro Cys Thr
                                     10
Leu Val Gly Glu Lys Ser Gln Ile Ser Lys Lys Glu Pro Tyr Val Arg
                                25
            20
Asn Leu Tyr Trp Lys Thr Asn Asn Leu Thr Leu Val Glu Trp Gly Asn
Thr
<210> 135
<211> 57
<212> PRT
<213> Homo sapien
<400> 135
Met Ser Leu Lys Ala Ser Leu Phe Asn Leu Leu Gln Lys Thr Gly Ile
                5
                                     10
```

Pro Ala Pro Cys Phe Thr Cys Leu Phe Leu Gly Val Trp Cys Pro Val 30 20

Ala Leu Ala Ser Cys Leu Ser Pro Ser Pro Cys Ile Tyr Ser Thr Phe 45 40

Leu Pro Thr Val Ser Lys Tyr Phe Phe

<210> 136

<211> 24 <212> PRT

<213> Homo sapien

<400> 136

Met Leu Arg Val Pro Leu Ile Ile Gln Met Asn Ala Val Ile Cys Asn 10

Asn Lys Ser Asn Ala Ile Thr Gln 20

<210> 137 <211> 33 <212> PRT <213> Homo sapien

<400> 137

Met Pro Ile Val Pro Ala Arg Ala Pro Leu Glu Ile Pro Ala His Cys

Ala Val Tyr Arg Ser Glu Leu Val His Ser Cys Thr Ser Arg Pro Arg 25

Leu

<210> 138 <211> 46 <212> PRT

<213> Homo sapien

<400> 138

Met Ala Lys Phe Pro Gly Phe Lys Gly Gln Leu His Tyr Ile His Lys 5 10

Ala Cys Leu Ser Leu Ser Phe Ser Gly Asp His Leu Arg Leu Gln His 25 20

Leu Pro Gly Arg Arg Ser Lys Pro Glu Cys Gln His Met Ala

<210> 139

<211> 78 <212> PRT

<213> Homo sapien

<400> 139

Met Leu Lys Thr Ser Ser Ile Leu Glu Leu Ile Lys Ser Leu Arg Tyr

Leu His Tyr Phe Tyr Lys Ile Ser Cys Ala Val Leu Asn Phe Arg Val 20

Val Lys Lys Ile Gly Thr Arg Val Thr Lys Lys Pro Asp Leu Asn Pro 40 35

Gly Leu Ser Leu Ile Ser Tyr Arg Gln Val Ile Asn Leu Ser Leu Leu 50 55

Gly Leu Ser Val Ser Glu Ser His Phe Ser Asn Val Ile Lys 70 65

<210> 140

<211> 142 <212> PRT

<213> Homo sapien

<400> 140

Met Lys Leu His Leu Asn Met His Ser Thr Lys His Pro Leu Ile Ser

Asn Gly His Pro Ser Val Val Ala Asn Ile Ile Ile Ala Ala Thr His

Ser Lys Ala His Cys Ser Asn Thr His Glu Ala Ile Ile Thr Cys Ala

Phe Ser Ala Asn Thr Ala Ser Pro Lys Ser Pro Ile Ala Asn Asn His

Ser Thr His Leu Gly Lys Gln Gly Lys Asp Thr Pro Gln Pro Met Ser 75 65

Thr Ser Tyr Thr Val Ser Ala Ser Cys Met Ser Ser Ile His Val Gly

Gln Trp Phe Ile Thr Phe Ser Tyr Gln Pro Ile Asp Leu Pro Thr Thr 100 105 110

Gln Lys Ser Lys Pro His Lys Asn Trp Gly Val Tyr Ile Ile Pro Leu 115 120 125

Arg Pro Lys Thr Lys Cys Thr Leu Val Pro His His Ile Ala

<210> 141

<211> 45

<212> PRT <213> Homo sapien

<400> 141

Met Ala Gln His Met Ala Leu Thr Phe Cys Gln Cys Ser Ala Val Tyr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Tyr Glu Arg Asn Asn Glu Phe His Ser Leu Leu Gly Thr Cys Pro Ser 20 25 30

Leu Asn Thr His Gly Thr Val Lys Pro Arg Ser Thr Ala

<210> 142

<211> 30 <212> PRT <213> Homo sapien

<400> 142

Met Asn Gln Ala Asn Leu Thr Val Leu Gln Asn Trp Gly Tyr Tyr Asn

Tyr Leu Gln Leu Leu Cys Thr Trp Gln Cys Asn Gly Leu His

<210> 143

<211> 50

<212> PRT <213> Homo sapien

<400> 143

Met Val Phe Lys Ile Ile Trp Phe Leu Phe Tyr Phe Phe Val Glu Asn

Ser Leu Tyr Arg Lys Arg Val Ala Gln Ala Ser Val Asn Ile Ser Cys 25

Thr Ser Ser Asp Pro Pro Thr Ser Val Ala Pro Lys Val Leu Arg Leu 40

Gln Ala 50

<210> 144

<211> 72 <212> PRT

<213> Homo sapien

<400> 144

Met Lys Asp Asn Met Gln Arg Lys Thr Gln Arg Glu Lys Arg Lys Glu

Thr Lys Val Lys Ile Ala Ser Trp Arg Leu Thr Thr Met Gln Trp Ser 25 20

Gln Lys Arg Asn Asn Ser Lys Ile His Thr Ala Leu Gln Cys Lys Trp 40

Gln His Val Gln Thr Asn Glu Arg Lys Leu Pro Lys Lys Arg Glu Asp 55

Asp Lys Lys Ala Gln Lys Lys Gln 70

<210> 145

<211> 64 <212> PRT <213> Homo sapien

<400> 145

Met His Ser Thr Gly Ala Asp Pro Lys Lys Pro Ser Gln Gly Tyr Thr 10

Asp Leu Asn Arg Tyr Phe Ile Cys Cys Leu Pro Gln Arg Lys Lys Ser 20 25

Leu Ser Leu Ser Pro Ala Asn Ala Ala Glu Thr Asn Lys Gln Lys Asn 35 40

Gln Thr Cys Pro Ala Pro Leu Glu Thr Arg Leu Pro Ala His Cys Ala 55

<210> 146

<211> 61 <212> PRT

<213> Homo sapien

<400> 146

Met Tyr Val Lys Asn Lys Pro Tyr Leu Arg Lys His Ile Leu Ile Ile

Leu Leu Ile Trp Arg Ser Tyr Leu Ser Asn Pro Thr Leu Glu Pro Arg 20 25

Arg Glu Ser Gly Ser Lys Gln Lys Ser Asn Arg Thr Thr Lys Val Tyr 35 40

Thr Arg Val Gln Thr Leu Gly Leu Ile Cys Ser Asp Leu 55

<210> 147 <211> 34 <212> PRT <213> Homo sapien

<400> 147

Met Lys Thr Asp Ser Glu His Ser Ile Leu Leu Asn Lys Asn Lys Cys

Ser Lys Lys Ser Arg Tyr Cys Cys Trp Arg Tyr Leu Gln Asn Val Asn

Arg Gln

<210> 148

<211> 46

<212> PRT

<213> Homo sapien

<400> 148

Met Arg His Ser His Leu His Phe Ser Pro Leu Met Ser Ala Pro Ser 5

Ile Cys Leu Asp Ser Phe His Ser Ile Leu Val Arg Thr Phe Ile Lys 20

Met Asn Lys Asn Ile Gln Thr Leu Lys Val Thr Leu Glu His 40

<210> 149

<211> 71

<212> PRT <213> Homo sapien

<400> 149

Met Val Ser Arg Leu Ser Leu Lys Val Ile Tyr Tyr Ser Ala Ile Leu

Val Ile Gln Phe Thr Asn Ile Leu Lys Ile Phe Cys Ala Met Val Phe 25 20

Ala Val Ser Gln Leu Asp Pro Ser Leu Tyr Thr Phe Leu Thr Val Tyr 40 35

Leu Ser Thr Met Ile Thr Arg Lys Leu Thr Arg Tyr Gly Leu Gln Leu 50 55

Phe Ser Ala Ser Ser Phe Gly

<210> 150 <211> 70 <212> PRT <213> Homo sapien

<400> 150

Met His Ser Met Leu Cys Pro Phe Gly Ser Ser Phe Arg Leu Ala Leu

Trp Ser Pro Phe Asp Asp Asn Pro His His Cys Gly Ser Ser Leu Cys

Val Glu Gln Leu Ser Asp Ala Ser Glu Tyr Ile Pro Gln Ile Leu Trp

Cys Ser Asn Asn Leu Phe Tyr Thr Ile Arg Gln Leu Tyr Thr Phe Tyr

Arg Phe Ser Phe Leu Ser

70

<400> 151

Met Cys Ile Ile Ser Val Glu Lys Gly Ile Ala Gln Trp Arg Lys Ser

Thr Pro Leu Ile His Gly Thr Leu Thr Gln Leu Gly Lys Glu Arg Glu

Leu Phe Pro Lys Glu Lys Gly His Pro Pro Lys Gly Lys Lys Lys 40

Lys Leu Gln Thr Gly Glu Glu Tyr Pro Val Asn Asn Pro His Ser Cys

Thr Tyr Phe Lys Asp Glu Tyr

<210> 152 <211> 43 <212> PRT <213> Homo sapien

<400> 152

Met Phe Leu Leu Ile Phe Cys Leu Leu Asp Leu Phe Ile Ser Asp Arg 10 1

Gly Val Leu Ser Asn Cys Thr Met Pro Asn Pro Asn Ser Ser Thr Leu 25 20

Arg Arg Tyr Lys Trp Ser Glu Leu Asp Pro Thr 40

<210> 153 <211> 22

<212> PRT

<213> Homo sapien

<400> 153

Met Leu Lys Ser Asn Ser Tyr Leu Pro His Ala Val Val Gln Arg Leu 10

```
Asn Cys Gly Asn Ser Ile
<210> 154
<211> 57
<212> PRT
<213> Homo sapien
<400> 154
Met Phe Tyr Gly Ile Leu Met Val Thr Arg Lys Gln Lys Lys Lys
Lys Lys Arg Gly Ile Leu Ala Glu Lys Phe Asn Leu Gly Ile Pro Gly
            20
Leu Ser Pro Lys Glu Asn Ser Pro His Leu Gln Arg Lys Thr Asp Arg
                            40
Glu Glu Glu Arg Ala His Trp Cys Ser
<210> 155
<211> 28
<212> PRT
<213> Homo sapien
<400> 155
Met Lys Lys Lys Lys Ser Arg Ala Tyr Lys Val Pro Thr Asp Phe
Pro Val Ile Trp Asp Thr Asp Gly Glu Ser Ser Asp
             20
 <210> 156
 <211> 18
<212> PRT
 <213> Homo sapien
 <400> 156
 Met Ser Ser Tyr Arg Arg Thr Gly Phe Ser Leu Leu Phe Ile Phe Ser
                                     10
 His Phe
```

<210> 157

```
<211> 45
<212> PRT
```

<213> Homo sapien

<400> 157

Met Lys Thr Tyr Thr Val Gly Gly Lys Ala Leu Ala Gly Arg Asn Ser

Glu Trp Arg Pro Lys Ile Ala Gln Arg Glu Phe Leu Pro Ile Leu Ala

Thr Leu Thr Phe Leu Cys His Leu Ser Arg Ile Gln Trp

<210> 158 <211> 38 <212> PRT <213> Homo sapien

<400> 158

Met Lys Val Pro Ile Asp Leu Gly Tyr Phe Lys Val Gly Asn Glu Lys 1.0

Glu Gly Arg Arg Thr Phe Arg Gln Ser Arg Gly Lys Val Tyr Leu Leu 20 25

Pro Asn Leu Pro Gln Asn 35

<210> 159

<211> 60 <212> PRT <213> Homo sapien

<400> 159

Met Arg Glu Ala Phe Asp Ser Val Ile Val Val Leu Cys Ile Ile Tyr

Arg Leu Gly Gln Val Gln Ser Pro Glu Ser Val Leu Ser Ser Asn Ala 25

Tyr Thr Gly Cys Ala Gln Ala His Pro Val Lys Ser Phe Cys Ser Thr

Ser Ala Tyr Asp Arg Lys Arg Cys Phe Lys Tyr Ile 50

```
<210> 160
<211> 63
```

<212> PRT <213> Homo sapien

<400> 160

Met Asp Ile Lys Ser Lys Ala Ile Gln Ser Glu Lys Lys Val Ile Ile 5

Ile Met Met Lys Gly Ser Ile Asn Ser Arg Arg Leu Leu Phe Phe Ile 20

His Pro Ile Ile Arg Ala Leu Lys Tyr Val Asn Gln Ile Leu Val Ser 40

Arg Ile Gly Ser Thr Leu Arg Pro Tyr Ser Asp Ala Ser Ser Leu 55

<210> 161 <211> 87 <212> PRT <213> Homo sapien

<400> 161

Met Pro Ile Cys Leu Lys Thr Cys Pro Gln Glu Leu Leu Phe Glu Cys 10 5

Ser Leu Ile Phe Phe Phe Val Thr Leu Pro Ser Phe Leu Pro Ser Phe 20 25

Leu Pro Ser Phe Leu Leu Cys Pro Ser Phe Ser Pro Ala Phe Phe Leu 35 40

Phe Val Arg Pro Glu Ser Cys Ser Val Ala Gln Ala Gly Val Trp Trp 50 55

His Asp Ile Ser Ser Leu Gln His Pro Pro Pro Lys Pro Asp Ser Ala 65 75

Glu His Ile Thr Ser Ala Pro 85

<210> 162

<211> 47

<212> PRT

<213> Homo sapien

<400> 162

Met Leu Gly Gly Ser Lys Thr Trp Asp Phe Gln Phe Phe Ser Leu Lys

Arg Ser Leu Pro Pro Asp Leu Arg Ala Val Gly Pro Arg Arg Ala Pro

Asn Leu Cys Ser Cys Ser Leu Glu Thr Ser Glu Arg His Val Leu

<210> 163

<211> 38

<212> PRT

<213> Homo sapien

<400> 163

Met Arg Thr Asp Val Ile Gly Thr Thr Leu Asp Ala Arg Asp Ser Arg

Thr Ser Lys Thr Gln Pro Phe Pro Leu Gly Lys Leu Thr Val Leu Gly 20

Glu Gln Leu Pro Ser Trp 3.5

<210> 164

<211> 61 <212> PRT <213> Homo sapien

<400> 164

Met Phe Thr Ala Leu Lys Phe Pro Leu Asn Pro Ala Leu Ala Val Leu 10

Leu Tyr Val Leu Val Met Leu Tyr Phe Cys Phe Gln Phe Ile Val Lys 20

Pro Phe Ser Asn Phe Pro Phe Asp Phe Gly Val Tyr Ser Leu Ile Ser 35

Thr Tyr Leu Trp Ile Phe His Lys Phe Leu Tyr Gly Tyr 50

<210> 165

<211> 52

<212> PRT <213> Homo sapien <400> 165

Met Met Tyr Pro Phe Val Ala Ser Gly Leu Leu Ile Ser His Thr Thr

Phe Glu Ile Ala Val Tyr Phe Ser His Leu Asp Leu Leu Ile Phe Ala

Leu Cys Ile Leu Gly Ala Leu Met Phe Ser Ala Cys Ile Leu Thr Val 40

Val Ile Leu Ser 50

<210> 166 <211> 49 <212> PRT <213> Homo sapien

<400> 166

Met Leu Thr Ala Cys Leu Leu Tyr His Leu Cys Ile Leu Thr Val Lys

Asn Asn Phe Ile Cys Leu Cys Thr Leu Cys Thr Ala Val Cys Arg Ser 25

Asp Val Cys Ser Ala Phe Ser Leu Val Tyr Phe Leu Trp Leu Tyr Leu 40

Tle

<210> 167 <211> 70 <212> PRT <213> Homo sapien <400> 167

Met His Leu Gln Ile Met Ile Val Phe Phe Ser Leu Gln Leu Ile Lys 1

Ser Phe Ile Phe Leu Ala Leu Leu His Cys Leu Glu Pro Leu Val Ser 25

Leu Asn Tyr Ala Gly Thr His Asn Thr Gly Asp Arg Ser Thr Met Asn 35

Arg Lys Ser Asn Arg Ser Tyr Val Val Val Tyr Leu Leu Leu Phe Val 50

Ser Cys Cys Phe Val Val

<210> 168

<211> 29

<212> PRT <213> Homo sapien

<400> 168

Met Glu Arg His Asn Phe Asn Lys Leu Gly Lys Asn Trp Ser Trp Phe

Phe Leu Lys Arg Asp Lys Gln Asn Gln Gln Thr Leu Ser 25 20

<210> 169 <211> 341 <212> PRT <213> Homo sapien

<400> 169

Gly Phe Ser Ala Lys Gly Ile Asn Lys Ile Asn Lys Pro Leu Ala Glu

Leu Arg Lys Lys Arg Glu Leu Lys Ile Arg Asn Glu Arg Glu Asp Ile

Thr Thr Glu Pro Thr Ile Lys Lys Asn Ile Asn Glu Tyr Tyr Glu Ala

Leu His Ile Asn Glu Leu Asp Asn Leu Glu Glu Met Glu Lys Phe Leu

Thr Ile Tyr Asp Leu Pro Lys Gln Glu Val Thr Glu Asn Leu Asn Lys

Pro Ile Thr Ser His Glu Thr Ala Val Arg Ile Lys Lys Leu Pro Val 90

Lys Lys Ser Pro Gly Gln Asp Gly Phe Ile Ser Leu Phe Ala Gln Thr

Phe Lys Glu Glu Leu Ile Pro Ile Leu Leu Lys Leu Phe Gln Lys Ile 115 \$120\$

Glu Glu Glu Gly Ile Leu Pro Asn Ser Phe Tyr Lys Ala Ser Ile Thr

	Leu 145	Ile	Pro	Lys	Pro	Asp 150	Lys	Asp	Thr	ser	Lys 155	Ile	Ile	Lys	Lys	Ala 160
	Asn	Tyr	Arg	Pro	Ile 165	Ser	Leu	Met	Asn	Thr 170	Asp	Ala	Lys	Ile	Leu 175	Asn
	Lys	Met	Leu	Ala 180	Asn	His	Ile	Gln	Gln 185	Tyr	Ile	Lys	Lys	Ile 190	Ile	His
	His	Asp	Gln 195	Val	Gly	Tyr	Val	Pro 200	Gly	Met	Gln	Gly	Trp 205	Phe	Asn	Ile
) () ()	Cys	Lys 210	ser	Ile	Gln	Val	Ile 215	Gln	His	Ile	Ser	Arg 220	Met	Lys	Asp	Lys
F TU D	Lys 225	His	Met	Ile	Ile	Ser 230	Ile	Asp	Thr	Glu	Lys 235	Ala	Phe	Asp	Asn	Ile 240
Provide Provide	Gln	His	Leu	Phe	Met 245	Ile	Lys	Thr	Leu	Lys 250	Asn	Leu	Asp	Ile	Glu 255	Gly
	Thr	Ala	Pro	Ala 260		Asn	Glu	Ser	His 265	Ile	Glu	Arg	Pro	Thr 270	Ala	Ser
	Ala	ı Ile	Leu 275		Ala	Gly	Thr	Thr 280		Thr	Ala	Phe	Pro 285	Leu	Arg	Ser
	Gl	7 Asn 290		Thr	Lys	Ile	Ser 295		ser	Pro	Leu	Phe 300	Phe	Arg	Ile	Ala
	Le:		. Val	. Leu	Gly	Arg 310		Leu	. Arg	Tyr	Gly 315	Glu	Arg	Ile	Thr	Gly 320
	Hi	s Glr	n Met	: Gly	У Lys 325		ı Glu	Asp	Thr	11e		Ser	Ser	Asp	Met 335	Thr

92 Ser Tyr Trp Glu Asn <210> 170 <211> 65 <212> PRT <213> Homo sapien <400> 170 Met Leu Glu Ile Ser Ala Asp Ile Ile Asn Tyr Pro Arg Arg Val Cys 5 Cys Leu Pro Pro Thr Phe Leu Ser Phe Leu Pro Pro Trp Ala Ser Ala 20 Ser Asp Ile Tyr Thr Ile Phe Leu Ile Ala Leu Phe Ser Ser Pro Arg 40 35 Ala His Tyr Ser Lys Ala Glu Ser Phe Leu Arg Leu Leu Ala Gly Pro 55 Phe 65 <210> 171 <211> 45 <212> PRT <213> Homo sapien <400> 171 Met Phe Thr Lys Gln His Gln Lys Tyr Asn Cys His Pro Val Gln Glu Ile Glu Gly Leu Pro Ala His Lys Ser His Ser Ser Thr Cys Pro Ala Phe Arg His Tyr Pro Leu Pro Arg Ile Thr Thr Phe Cys 40 <210> 172 <211> 41

<210> 172
<211> 41
<212> PRT
<213> Homo sapien
<400> 172

Met Ser Gly Tyr Thr Gly Leu Trp Ile Thr Val Lys Leu Phe Gln Glu
1 5 10 15

<400> 175

Val Leu Tyr Phe Val Leu Ala Gly Leu Leu Ile Met Leu Val Glu Leu 25 Glu Leu Leu Val Lys Val Ser Phe 35 <210> 173 <211> 54 <212> PRT <213> Homo sapien <400> 173 Met Phe Val Glu Pro Ser Thr Phe Phe Pro Phe Asp Val Gly Asn Ser 5 10 Ile Lys Gln Gln Glu Lys Ser Val Asp Arg Phe Leu Ser Leu Ser Leu 20 25 Ser Leu Ser Val Ser Leu Pro Phe Lys Ile Cys Thr Phe Gln Leu Val 40 Phe Gly Pro Leu Gly Ser 50 <210> 174
<211> 23
<212> PRT
<213> Homo sapien <400> 174 Met His Gln Thr Ala Glu His Pro Asn Thr Leu Arg Gln Thr Leu Ile 10 Glu Leu Glu Glu Glu Leu Asp 20 <210> 175 <211> 53 <212> PRT <213> Homo sapien

Met Leu Ile Asn Lys Val Ile Lys Gln Leu Thr Ile Pro Gly Met Gly

Arg Ala Lys Ile Tyr Leu Glu Lys Val Gly Gln Glu Phe Pro Thr Leu

Arg Thr Leu Ile Ser Pro Ser Lys Ile Lys Thr Leu Phe Gly Ser Thr

His Phe Thr Thr Gln 50

<210> 176

<211> 69

<212> PRT <213> Homo sapien

<400> 176

Met Gly Gln Ala Phe His Leu Phe Phe Gln Lys Cys Leu Leu Tyr Met

Ile Leu Ile Tyr Tyr Ser Lys Asn Leu Val Ala Thr Leu Phe Ala Gln 20

Lys Gly Ile Phe Phe Arg Leu Ser Leu Ser Gln Lys Phe Pro Glu Leu 35 40

Ile Ser Glu Ile Cys Leu Leu Val Leu Phe Lys Gly Pro Met Phe Ala 55

Thr Ser Val Leu Cys

<210> 177

<211> 47 <212> PRT <213> Homo sapien

<400> 177

Met Thr Val Leu Ala Asn Gly Leu Thr Glu Tyr Ile Ile Leu Arg Lys 10

Glu Pro Gln Ser Lys Val Ile Asp Trp Leu Phe Lys Glu Gly Asn Tyr

Arg Gln Ala Ala Arg Trp Leu Glu Thr Cys Leu Leu Arg Arg Tyr 4.0

<210> 178

```
<211> 69
```

<213> Homo sapien

<400> 178

Met Val Glu Leu Ala Pro Cys Thr Ala Ala Asp Val Leu Ala Phe Gly

Phe Arg Ala Ala Pro Gly Gln Val Leu Met Lys Met Phe Tyr Asn Cys 20 25 30

Ile Tyr Gly Leu Lys Trp Leu Lys Gln His His Arg Phe Phe His Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Cys Val Val Cys Glu Thr Asp Ala Ser Leu Gly Ile Asn Thr Gln Glu 50 $\,$

Lys Asp His Thr Ile

<210> 179

<211> 80 <212> PRT

<213> Homo sapien

<400> 179

Pro Ile Gly Ala Thr Met Ala Gln Val Thr Gln Cys Gln Glu Val Pro $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Glu Lys Val His Ala Trp Gln Ser Glu Tyr Ser Leu Val Ser Tyr Ile 35 40 45

Leu Gly Arg Gln Glu Leu Trp Val Asn Thr Leu Val Ser Pro Gln Lys $_{50}$

Val Gly Tyr Leu Glu Arg Gly Glu Ile Met Arg Lys Glu Ile Tyr Val 65 7075 75 80

<210> 180

<211> 38

<212> PRT

<213> Homo sapien

<400> 180

<212> PRT

Met Tyr Phe Ser Leu Val Ser Ser Pro Thr Met Val Phe Gly Trp Leu 10

Ser Leu Ile Ser Tyr Thr Trp Lys Arg Arg Val Met Gly Phe Glu Thr 25

Phe Phe Lys Lys Ile Val 35

<210> 181

<211> 58 <212> PRT

<213> Homo sapien

<400> 181

Met Asn Ile Asn Thr Leu Thr Phe Ile Thr Thr Val Trp Phe Ser Gln

Leu Tyr Leu Leu Asp Ile Thr Tyr Ser Leu Asp Ala Phe Phe Thr Ser

Asp Leu Pro Ile Leu Phe Val Ile Thr Cys Lys Asn Phe Val Gly Phe 40

Ile Phe Ile Ser His Ser Phe Leu Gln Ala 55

<210> 182 <211> 36 <212> PRT <213> Homo sapien

<400> 182

Met Cys Ser Asn Gly Ala Ala Glu Val Ile Tyr Cys Phe Leu Gln Tyr 10

Cys Ser Leu Glu Val Ala Arg Ile Leu Phe Ile Leu Leu Phe Val Ser 25

Ser Phe Leu Tyr 35

<210> 183 <211> 82

<212> PRT

<213> Homo sapien

<400> 183

Lys Pro Ser Ser Pro His Trp Pro Pro Lys Tyr Trp Asp Tyr Arg His

Glu Pro Pro Cys Pro Asn Phe Asn Phe Gln Leu Gln Lys Phe Glu Cys 35 40 45

Thr Leu Trp Arg Lys Pro Tyr Leu Ala Ala Thr Thr Leu Ser Arg Ile 50 $\,$

Pro Ala His Gly Ala Val Ile Val Met Trp Leu Asp Lys Leu Val Arg 65 70 75 80

Pro Leu

<210> 184

<211> 131

<212> PRT

<213> Homo sapien

<400> 184

Met Thr Pro Ser Arg Ile Gln Gly Glu Asn Ser Ile Phe Phe Phe Phe 1 10 15

Asn Leu Arg Thr Gly Phe Phe Thr Ser Cys Ser Pro Ser Ala Trp Ser

Cys Arg Trp Val Leu Ile His Trp Phe Tyr Ser Cys Ser Leu Leu Asn $_{35}$ $_{40}$ $_{45}$

Phe Leu Cys Tyr Ser Arg Ile Ser Cys Arg Ile Ile Pro Ser His Thr 50 60

Trp Arg Ala Arg Ser Arg Ala Ile Val Ile Leu Arg Arg Gly Pro Asn 65 70 75 80

Ser Arg Pro Leu Tyr Ser Val Arg Leu Ala Ile Tyr Asn Ser Pro Leu 85 90 95

Gly Pro Leu Arg Cys Tyr Thr Thr Val Arg Val Thr Trp Glu Lys Pro

105

110

Cys Gly Val Tyr His Asn Phe Asn Ser Pro Phe Ala Ser Lys Ile Pro 120 Pro Phe Leu 130 <210> 185 <211> 60 <212> PRT <213> Homo sapien <400> 185 Met Asp Leu Tyr Leu Gly Tyr Pro His Phe Leu Glu Ser Thr Ser Phe 10 Lys Cys Ile Cys Ser Ser Ser Gly Tyr Ile Pro Thr Tyr Met Ala Tyr Gly Asn Phe Lys Leu Ser Phe Ser Lys Ile Ser Ser Phe Leu Tyr Ser 40 Ile Cys Thr Leu Leu Val Pro Asn Thr Phe Ile Met <210> 186 <211> 45 <212> PRT <213> Homo sapien <400> 186 Met Met Gly Leu Pro Leu Thr Ile Phe Pro Lys Pro Leu Pro Pro Lys 5 Lys Lys Ser Leu Leu Leu Ile Phe Lys Glu Lys Val Leu Leu Ile Val 20 25 Leu Leu Pro Leu Leu Phe Pro Gln Asn Leu Tyr Ala Lys 35

<210> 187 <211> 105 <212> PRT

TOODIE'S TIPODI

<213> Homo sapien

<400> 187

Phe Phe Phe Phe Leu Arg Gln Ser Phe Ala Leu Val Ala His Ser 10

Leu Arg Val Pro Ala Ala Arg Phe Leu Ala Leu His Lys Pro Pro 20

Pro Arg Phe Lys Ala Phe Ser Ser Leu Ser Leu Leu Ser Ser Trp Tyr 40

Tyr Arg Arg Ala Pro Pro Gly Pro Ala Asn Phe Phe Leu Phe Leu Phe 50

Phe Val Glu Met Gly Phe Tyr Arg Val Gly Arg Ala Gly Leu Gly Leu 70

Leu Ala Ser Gly Gly Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile 90

Ala Gly Val Thr Tyr Arg Thr Arg Pro

<210> 188 <211> 67 <212> PRT <213> Homo sapien

<400> 188

Met Val His Thr Gly Leu Phe Pro Leu Tyr Tyr Ile Pro Glu Asn Thr 10

Ser Ile Phe Phe Ala Tyr Lys Phe Ile Val Pro Phe Ser Ser Val Pro

Pro Leu Pro Leu Leu His Ser His Leu Glu Thr Ile Thr His Leu Leu

Ala Ile Arg Gly Phe Leu Arg Ile Leu Val Leu Lys Phe Phe Arg Tyr

Leu His Phe 65

<210> 189

<211> 20 <212> PRT

```
<213> Homo sapien
```

<400> 189

Met Lys Glu Ile Gly Gly Gln Glu Pro Asn Thr Lys Asp Pro Thr Thr

Pro Trp Gln Pro

<210> 190

<211> 54

<212> PRT <213> Homo sapien

<400> 190

Met Lys Trp Phe Asn Ile Leu Lys Thr Cys Phe Lys Ile Asp Leu Ser

Lys Gln Val Trp Gly His Phe Gly Asn Ile Gly Glu Arg Tyr Gly Gly 25 20

Ser Pro Ser Gly Val Ile Arg His Arg Lys Gly Arg Pro Cys Ala Thr 40 35

Arg Lys Arg Ile Ile Tyr 50

<210> 191

<211> 119 <212> PRT

<213> Homo sapien

<400> 191

Met Val Tyr Ile Met Ile His Met Tyr Asn Ile Lys Cys Asp Met Leu

Met Tyr Val Gly Ser Asp Leu Leu His Ile Cys Cys Tyr Leu Leu Ser

Val Cys Cys Pro Cys Ser Leu Phe Leu Phe Leu Ser Phe Thr Tyr Phe

Leu Pro Phe Glu Ser Asn Leu Ile Ile Phe His Phe Pro Phe Ser Phe 50

Asn Ile Ser Val Ile Leu Leu Lys Gln Phe Leu Ile Val Ile Leu

Asp Ile Ala Ile Cys Ile Tyr Asn Met Lys His Met Thr His Ile Ser 90

Asn Asp Thr Ile Thr His Ser Pro Ala Ser Gln Ser Thr Ala Gln Pro 100 105

Glu Val Gln His Thr Ala Pro 115

<210> 192 <211> 42

<212> PRT

<213> Homo sapien

<400> 192

Met Val Ile Asp His Gly Arg Ala Ala Gln Cys Asp Val Val Ser Ala 10

Glu Ser Gly Leu Leu Val Leu Val Phe Pro His Phe Ile Ile Cys Leu 25

Gly Ala His Arg Leu Ala Ser Leu Thr Tyr 40

<210> 193

<211> 89

<212> PRT <213> Homo sapien

<400> 193

Met Ser Ser Glu Ser Leu Ser Val Ser Phe Leu His Cys Leu Thr Trp 10

Ile Ser Gly Leu Ile Tyr Ser Arg Leu Ile Leu Phe Leu Pro Ala Pro 20 25

Gln Gln His Ile Tyr Thr Gln His Thr His Tyr Ile Leu Tyr Ile Ser 35

Ile Tyr Ser Thr Pro Ala Val Lys Phe Gln His Gly Ser Gly Ala Thr 55 50

His Pro Ala Val Asp Asn Ile Asn Ile Leu Val Cys Met Tyr Leu Pro 65 70

Gly Arg Pro Leu Glu Ser Arg Arg Ser 85

<210> 194

<211> 32 <212> PRT

<213> Homo sapien

<400> 194

Met Gln Glu Arg Lys Pro Arg Lys Lys Gly Asn Ser Lys Val Arg Leu

Leu Pro Pro Gln Leu Pro Gly Asn Asn Phe Leu Thr Arg Ala Asp Ser

<210> 195

<211> 48

<212> PRT <213> Homo sapien

<400> 195

Met Leu Leu Ser Tyr Val Gln Ser Phe Tyr Tyr Ser Trp Arg Val Ser 10

Asn Ser Ala Pro Phe Leu Leu Gly Arg Asp Ile Ile Leu Ser Cys 25

Val Ser Phe Ser Ile Ala His Asn Cys Glu Ala Leu Val Thr Trp Ser 40

<210> 196

<211> 93 <212> PRT

<213> Homo sapien

<400> 196

Met Val His Leu Leu Gln Asp Thr His Trp Gly Leu Trp Val Pro Lys 5 15

Glu Gln Asn Ser Tyr Ser Ser Thr Ser Ser Phe Cys Ser Ser His Leu 20

Phe Met Gly Phe Ile Ala Leu Leu Thr Lys Ile Val Leu Ala Ile Ser 35

Val Leu Phe Gly Leu Gly Ile Leu Arg Pro Phe Ser Ser Ser Tyr Ser 50 55 60

Val Ala Leu Tyr Lys Phe Leu Leu Leu Asn Ile Gln Val Gly Tyr Gly 65 70 75 80

Ser Leu Ile Val Gly Pro Gln Pro Phe Leu Leu Asp Leu 85 90

<210> 197

<211> 161 <212> PRT

<213> Homo sapien

<400> 197

Met Val Pro Lys Leu Phe Thr Ser Gln Ile Cys Leu Leu Leu Leu Leu 1 5 5 10 15

Gly Leu Leu Ala Val Glu Gly Ser Leu His Val Lys Pro Pro Gln Phe 20 25 30

Thr Trp Ala Gln Trp Phe Glu Thr Gln His Ile Asn Met Thr Ser Gln 35 40 45

Gln Cys Thr Asn Ala Met Gln Val Ile Asn Asn Tyr Gln Arg Arg Cys 50 60

Lys Asn Gln Asn Thr Phe Leu Leu Thr Thr Phe Ala Asn Val Val Asn 65 70 75 80

Val Cys Gly Asn Pro Asn Met Thr Cys Pro Ser Asn Lys Thr Arg Lys 85 90 95

Asn Cys His His Ser Gly Ser Gln Val Pro Leu Ile His Cys Asn Leu 100 105 110

Thr Thr Pro Ser Pro Gln Asn Ile Ser Asn Cys Arg Tyr Ala Gln Thr 115 120 125

Pro Ala Asn Met Phe Tyr Ile Val Ala Cys Asp Asn Arg Asp Gln Arg 130 135 140

Arg Asp Pro Pro Gln Tyr Pro Val Val Pro Val His Leu Asp Arg Ile 145 150 155 160

```
<210> 198
<211> 88
<212> PRT
<213> Homo sapien
<400> 198
Met Ile Gly Thr Leu Leu Thr Val Trp Leu Arg Ile Thr Ser Trp Arg
Cys Met Cys Tyr Leu Ile Leu Ile Asn Phe Leu Leu Arg Arg Cys
            20
Ile Ala Leu Gly Ser Gln Gly Trp Ser Ser Ser Gly Val Ile Leu Ala
                            40
His Met Leu Ile Ser Ala Ser Trp Val Gln Ala Ile Ser Pro Ala Ser
   50
                       55
                                            60
Ala Ser Arg Asn Ser Ile Gly Leu Gln Ala Pro Ala Thr Ile Arg Arg
65
                    70
Gly Leu Ile Phe Leu Tyr Ser Leu
               85
<210> 199
<211> 27
<212> PRT
<213> Homo sapien
<400> 199
Met Gly Leu Asn Glu Leu Ser Ser Lys Trp Gly Arg Lys Ser Lys Glu
Trp Asn Leu Leu Asn Gln Val Asn Phe Lys Gln
<210> 200
<211> 61
<212> PRT
<213> Homo sapien
<400> 200
```

Met Asp Gln Lys Leu Leu Arg Asn Ser Gly Ser Glu Arg Met Thr Val

Ala His Leu Val Tyr Ser Ala Ser Gly Arg Ile Val Ser Gln Tyr Ser 20 25

Arg Glu Ile Met Pro Ser Ile Thr Glu Ser Val Arg Val Val Ser Ser

Ala Ile Leu Arg Arg Cys Ala Gln Val Ala Ala Ser Leu

<210> 201

<211> 76 <212> PRT

<213> Homo sapien

<400> 201

Met Lys Gly His Leu Pro Cys Pro Leu Phe Ser Leu Asn Tyr Leu Cys 1.0

Lys Tyr Phe Leu Thr Val Ile Leu His Pro Thr Lys Ile Lys Phe Ser 20 25

Pro Ser Phe Cys Pro Ser Ser Arg Asp Phe Phe Ser Asp Pro Ser Phe 35 40

Phe Leu Gln Asn Leu Phe Phe Leu Phe Phe Trp Thr Trp Leu His Glu 50 55

Phe Leu Ser Arg Leu Arg Leu Leu Arg Ser Asp Ser 65 70

<210> 202

<211> 24 <212> PRT

<213> Homo sapien

<400> 202

Met Tyr Leu Tyr Val Thr Gly Thr Leu Ile Leu Leu Asn Ile Ser

Ser Ala Ile Ile Tvr Thr Val Glu 20

<210> 203 <211> 52 <212> PRT

<213> Homo sapien

<400> 203

Met Arg Ser Arg Asp Pro Val Asp Asp Val Phe His Leu Ser Glu Ser 5

Thr Cys Pro Leu Leu Pro Trp Val Gly Pro Pro Arg Pro Pro Ile Leu

Leu His Pro Ala Arg Ile Gln His Trp Tyr Thr Gln Arg Leu Leu Ser

Cys Val Leu Thr 50

<210> 204

<211> 44 <212> PRT

<213> Homo sapien

<400> 204

Met Arg Asn Gln Cys Asn Tyr Leu Phe Asn Arg Trp Gly Lys Cys Phe 10

Asn Val Phe Phe Tyr Arg Phe Leu Gln Tyr Cys Val Ile Leu Met Phe 20 25

Phe Tyr Ile Arg Val Lys Ser Leu Leu Leu Pro Thr 35

<210> 205

<211> 118 <212> PRT <213> Homo sapien

<400> 205

Met Lys Glu Lys Ala Leu Val Leu Leu Val Leu Gly Ser Phe Phe

Phe Cys Ser Cys Phe Phe Phe Leu Phe Val Leu Leu Val Leu Leu Leu 20

Leu Leu Val Ala Leu Leu Ile Ser Ser Cys Val Leu Phe Leu Cys Leu

Val Leu Cys Ser Cys Ser Ser Leu Phe Leu Tyr Leu Leu Ser Cys Ser

60

Val Leu Ile Leu Phe Ala Leu Ser Ser Phe Phe Leu Ser Leu Leu Pro 70

55

Val Ala Cys Ser Ser Ser Leu Ser Val Leu Asp Ser Phe Leu Ile His 90

Ile Pro Phe Phe Tyr Ser Leu His Arg Leu Val Ser Trp Phe Phe Ser 105 100

Leu Pro Ser His Val Ser 115

<210> 206

<211> 206 <211> 78 <212> PRT <213> Homo sapien

<400> 206

Met Asp Cys Ser Thr Lys Val Glu Thr Tyr Gly Tyr Ser Gly His Gly

Gly Ile Leu Cys Gln Gly Asp Gln Arg Leu Ala Leu Ser Leu Phe Ser

Leu His Met Thr Ser Arg Leu Ser Val Phe Gln Pro Lys Asp His Gly 40

Leu Leu Ser Ile Pro Gly Gly Phe Val Pro Phe Gly Lys Arg Ala Ser

Glu Ile Tyr Phe Thr Lys Tyr Ala Lys Asp Cys Asn Asp Leu 70

<210> 207

<211> 38

<212> PRT

<213> Homo sapien

<400> 207

Met Gly His Arg Ser Pro Ile Lys Cys Tyr Phe Leu Cys Leu Val Ile 10 5

Leu Leu Val Leu Lys Ser Ile Ile Pro Asp Ser Cys Ile Ala Ser Leu 20

Val Phe Phe Cys Asn Cys 35

<210> 208 <211> 25

<212> PRT

<213> Homo sapien

<400> 208

Met Lys Leu Leu Phe Val Cys Val Ser Cys Asn Tyr Phe Val Ile Ile 10

Tyr Leu Phe Lys Gln Arg Ile Val Phe 20

<210> 209 <211> 128 <212> PRT

<213> Homo sapien

<400> 209

Met Cys Arg Leu Ser Leu Leu Pro Phe Pro Phe Phe Arg Ser Ser Leu 10

Leu Leu Pro Pro Arg Gly Pro Arg Arg Ala Val Leu Leu Val Val Pro

Leu Leu Ser Ala Pro Gly Ala Arg Val Phe Val Leu Arg Cys Pro Leu

Leu Val Phe Leu Ser Leu Ala Ala Ala Phe Arg Arg Leu Pro Phe Ser

Arg Leu Leu Ser Leu Val Ser Ala Val Leu Phe Ala Ala Pro Cys Ile

Ser Leu Leu Arg Cys Cys Val Leu Val Ser Cys Phe Phe Leu Phe Leu

Ser Arg Ser Ser Phe Ser Ile Phe Val Cys Gly Phe Trp Leu Phe Val

Phe Cys Cys Leu Ile Ser Ser Cys Leu Cys Ile Leu Met Phe Gly Leu 115 120

<210> 210

<211> 215

<212> PRT <213> Homo sapien

<400> 210

Met Val Ala Trp Leu Val Cys Ser Leu Leu Gly Pro Cys Arg Phe Ser 1 10 15

Ser Phe Leu Ser Phe Phe Leu Cys Ser Ser Ser Ala Phe Cys Leu Ser 20 25 30

Phe Ala Phe Cys Ser Leu Leu Leu Leu Ala Val Leu Phe Cys Trp Phe 35 40 45

Trp Arg Pro Ser Ala Val Leu Ser Pro Leu Arg Leu Ser Phe Leu Arg 50 $\,$ 55 $\,$ 60 $\,$

Pro Ser Val Cys Ser Cys Val Val Cys Val Leu Val Cys Gly Leu Ser 65 70 75 80

Ser Asp Val Leu Leu His His Leu Leu Cys Arg Ser Ser Phe Leu Pro 85 90 95

Leu Leu Ile Arg Leu Leu Phe Arg Leu Ser Arg Cys Arg Ser Ser Cys $100 \ \ 105 \ \ \ 110$

Arg Leu Pro Phe Cys Cys Leu Trp Pro Leu Val Ser Ser Pro Ser Leu

Phe Ser Leu Ile Ser Ser Asp Met Leu Arg Ala Val Phe Phe Ser Ala 130 135 140

Gln Leu Gln Gln Ser Cys Ala Pro Leu Ser Leu Ser Ser Ser Leu Phe 145 150 150 160

Ser Cys Cys Cys Val Trp Trp Cys Val Val Val Tyr Ser Gln Met Arg 165 $$170\$

Glu Arg Glu Val Gly Ser Gly Val Arg Pro Leu Leu Leu Phe Leu Cys 180 \$180\$

Val Val Glu Arg Ala Gly Val Ser Val Asp Lys Phe Pro Leu His Leu 195 200 205 Ser Ser Leu Leu Ser Leu Phe 210

<210> 211 <211> 63 <212> PRT

<213> Homo sapien

<400> 211

Met Cys Leu Ala Ile Arg Val Thr Ser Gly Ala Arg Ala Gly Thr Pro

Arg Leu Val His Leu Pro Gly Ser Gly Leu Arg Thr Pro Ser Ala Val 20 25

Gln Pro Pro Ala Val Pro Ala Val Ala Ser Pro Tyr Leu Leu Val Asn

Tyr Lys Val Pro His His Gly Ser Gly Ser His Leu Asp Leu Tyr 50